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# NEEDLES AND BRUSHES 

AND HOW TO USE THEM<br>A MANUAL OF FANCY WORK

BY<br>JANE EYRE

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EMBROIDERING PAINTING MODELLING CARVING ETO

CHICAGO AND NEW YORK BELFORD, CLARKE \& CO.

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## INTRODUCTION.

I LIKe the old-fashioned term "fancy-work," because it is such a true word. To many a woman whose life is, of necessity, spent chiefly in the pursuit of very prosaic and wearing duties, the painting of a tile, the working or knitting of a bit of lace, the copying of a flower in silk or worsted, is, indeed, fancy work. It is a little opening into the ideal world, which does her untold good, and which serves to brighten and cheer long days of plain sewing, sweeping, dusting, etc.

In preparing this manual, my aim has been to give such a variety of directions and hints, that something may be found to suit every taste. And while I have endeavored, at the risk of being blamed for undue prolixity, to make my directions extremely plain and practical, I have tried to make them also suggestive. I hope this book may be to many a guide post pointing on to pleasant fields not described in it.

I have tried to make my directions thoroughly reliable, having, in most instances, verified them as I wrote. As far as possible, I have avoided technical terms, thinking simplicity desirable. I am particularly indebted to Mrs. Glaister's book on Art Embroidery, to the Art Interchange, and to Mr. C. G. Leland, of the Philadelphia Industrial

School, who very kindly responded to my request for information.

The chapters on Decorative Design, Repoussee Work, Leather Work, and Papier-Mache, derive most of their authority from the writings of the latter gentleman. I would advise any one interested in these subjects to consult Mr. Leland's Manuals, which are written with an enthusiasm and clearness most inspiring.

Much care has been exercised in selecting the illustrations, none being given which cannot easily be understood by the aid of the directions.

In conclusion, I wonld beg my readers to bear in mind that success in any work, whether decorative or otherwise, cannot be achieved at once. The old adage, "Make haste slowly," has lost none of its force.

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## DECORATIVE DESIGN.

I fear many will look at the heading of this chapter with the feeling that it, at least, will be of no value to them. But I would ask them to panse before they tum to what they will probably call the more practical parts of this manmal; for the subject treated here lies at the very foundation of any work we may wish to do with needles and brushes.

I would like to impress upon all who wish to perfect themselves in lecorative work the adrantage of learning to draw and adapt, eren if they do not invent their own desigus. And this is a much easier thing to do than miny think. I well remember the semi-despair that seizerl me when taking my first lesson in china painting, at heing told by my instructor to draw what 1 wanted to paint. However, I found that by combining one or two Howers together, I had made what seemed then to me a rery pretty design. And I have often thought that was about the most raluable lesson I ever received, for it showed me what could be done by effort, and encouraged me to depend on myself instead of on tracing paper. So much for a personal experience. Let me quote a high authority on this subject, Mr. Lelamd, of the Philadelphia Industrial School. In his "Mamual of Drawing and Decorative Design" (a most suggestive and helpful pamphlet), he says:
"The first thing for the pupil to do is to become familiar with the lead pencil. I say the lead pencil-thongh if a black-board is accessible, it is to be insisted on that
all that is done with the pencil shall also be practised with chalk. Free-hand drawing cannot be too free. The hand, practised to sweep boldly yet steadily in spirals, circles and curves, can be trained in a short time to a rapidity of execution and an merring acenracy which seem miraculons to many. Let us consider how this is to be acquired. The begimuer shonld take a lead pencil, not too soft, an H. or H. B. (hard or medinm) will do. Practice for some days on a gromul-glass slate, such as costs from twenty-five to fifty cents, tracing the outline pictures which are sold with such slates. . . . . In tracing the ontline pictures draw very slowly indeed at first. . . . Draw with the point of the lead, not with its side. . . . . After practising on the slate mutil you feel familiar with the pencil, get some transparent paper, through which an ordinary ontline picture can be plainly seen. Now trace with increased care."

When the mastery of the pencil has been so far attained that yon can draw a firm but light sweeping line, yon can begin copying good ontline sketches, say a sim. ple spray of leaves. The next step may be taken by arranging the leares in a circle, or along a line of construction formed by drawing semi-circles or segments of circles alternately above and below a horizontal line. If yon find difficulty in doing this, ent your leaves out in paper and arrange them on your construction line. Trace the outlines, and repeat. Inclose the design thus formed within parallel lines and the result will be a design for a border. For a centre piece you would need a different method. Draw a circle or ellipse of the size required. Draw horizoutal and perpendicular diameters through this, and arrange yom leaves on these lines, or else arrange them in a wreath on the curved line. Mr. Leland recommends a little affair, made somewhat on the principle of a kaleidoscope to help in getting the idea of ymmetrical and pleasing combinations.
"Obtain two strips of looking glass, each two inches wide and six inches long. Paste their backs on a single piece of tough paper, or muslin, which may just be brought over the edge to prevent cutting. Do this so that the glasses will open and shut like a portfolio. Now take any small drawing of any kind whaterer, an ontline sketch of a leaf being the best, staud the glasses upright at an equal angle, and put the small design between them. By the figure formed by the reflections it may be seen that any design, however meaningless or $i r$ regular, becomes symmetrical as a part when it is accurately repeated in union with itself."

Practice drawing a spiral line, for it, in varied combination, is the foundation of graceful design. "The first step after repeating simple designs, is to evolve the offshoots or transcendental curves, or long V's from a spiral."

Study of a good, conventional design with an endeavor to discover its " motive" or foundation line will aid one much in forming combinations of their own.

The same general directions will aid one in forming less conventional designs. Study beantiful forms in nature. If you cannot copy them directly from the object, draw them from good ontlines, using tracing paper if uecessary. It will not be long before you throw aside this aid, and trist to your own resources. And as your power over your pencil grows, your interest in your work will also grow. Magazines and pupers will constantly sield you new suggestions. A portfolio or box will soon be needed to contain your collection of "hints." Nature even will acquire a new interest to you. Copy, whenever you can, anything that strikes you as really good. Your taste will be educated in the process. By no means neglect to make copies of letters, either quaint or pretty. Your reading will soon be taxed for the benefit of your new pursuit. To say
nothing of books bearing directly on the subject, such as the works of Owen Joues, Whewell, Dusser, etc., quaint or peculiarly appropriate mottoes will be seized on with avidity, either suggesting al design or illnstrating one already in hand.

But in designing you most bear in mind the fact that you must work always within certain limitations. Absolute imitation of nature is impossible in decorative art. It is one of the principles most to be insisted on, that decoration is not picture making. It must not detract from the original usefulness of the object decorated. It also must be limited by the material in which the design is to be executed. Thus, in needle-work, the characteristic outlines of a flower are all that should be attempted. Iu working a pink or a corn-flower, for instance, it would be folly to imitate closely the notched elges of the petals. The fact that they are serrated can be indicated by a few lines. In like manner the reins should be snggested rather than elosely copied.

Again, the design should be clear and free. Leaves which are naturally erowded and overlap each other should be so far conventionalized as to lie flat and distinct. While we may alter the arrangement of leares and flowers to suit our purpose to a certain degree, we must remember that the character of the phant form must always be maintained. We may make a trailing or wreath-like design of the ivy, rose, or backberry, because nature herself suggests such a use. But a wreath formed of tulips, daffodils, or calla-lilies wonld be a sad mistake. The upright flowers, are, however, very useful for such parposes as borders, mantel balances, ete.; but when thus used, the flowers should always be supported and bound together, in a manner, by one or more horizontal lines of decorative work. If for a border, lines above as well as below the design serve to emphasize it and throw it out. The same effect is produced by work-
ing the design on a separate strip of material and apply. ing it to the piece of work to be decorated.

I have dwelt a little at length on this subject because so many of the decorative arts are dependent on it. In fact, I doubt if any ever attain too much excellence in certain departments of ornamental work, without finding, through much tribulation, that thes must learn to draw.
One cantion in closing. Do not, until you have practised for a long time, attempt to draw from memors. Have the form which is the foundation of your design before yon, remembering always that no matter how much you may conventionalize that form, the characteristics of the original must be preserred.
let me add a word of encouragement taken from the Mantal quoted above. "If a beginner can only draw a line half an inch long, in a clean, well-defined manner, and with confidence, he may hope to do ansthing in art," and " My y own experience warrants me in declaring that grown-up people learn to draw much more rapidly than children, since they have better memories, stronger will, and far more perseverance."

## EMBROIDERY.

In seleeting materials for embroidery it is well to remember that, as this kind of work is very durable, the best are always the cheapest.

The foundations usually employed are linens of varions makes, inchuling crash, Bolton sheeting (an English fabric whose place can be smpplied here by an mbleached cotton knit called Wamsutta twill), Momie cloth, lootla in wool and eotton, canton flannel, serge, felt, satin, velret and plush.

The materials with which the work is done are as varied. Marking cotton, crewels, the many varieties of embroilery silk, arrasene (a kind of chenille), gold and silver thread, and bullion, are all used.

In planning a piece of work there are several things to be taken into consirleration. The use for which the arti. cle is designed must govern largely the choice of the material. It wonld be absurd to use silk or relret for a bureau cover, or crash for a banner sercen. For this reason the tidies, which have been so fashionable of late, formed of squares of painted satin, set together with lace always strike me as in bad taste. Darned net, drawn work, fine linen sketched with indelible ink or worked in outline, would make equally dainty tidies, while the fact that they can be easily laundried makes their name seem no longer a misnomer. Again, the material with which we work must be adapted to the foundation. Crewel would be ont of place on handsome silks and satins, but is very suitable for all the varieties of
linen, cotton, and woollen goods. A judicious use of a few stitches of silk will often add wonderfully to the brilliancy of crewel work.

Filofloss and etching silks are both admirable for working outline designs on linen.

Etching silk works best when you use it as it comes from the spool; that is, thread your needle before cut-


Fig. 1.
ting off the silk. Used in this way, it is not so apt to untwist or knot.

There are quite a number of stitches employed in embroidery, but ouly a few are generally used. Of these
the most important is what is generally called outline or stem stitch. It is extremely simple, being merely a kind of back-stitch, which can easily be understood from the desigus in this stitch-as in Figs. 1 and 2. Very fine lines are sometimes worked in what is called split stitch, in which the needle is brought out so as to split the thread instead of coming to one side. The main beauty


Fig. 2.
of outline work consists in the design, which should be well studied and drawn, and in the perfect neatness of the execntion. Althongh a diversity of colors are some. times employed, as a rule, one or tro shades of a single color will gire the most satisfactory results. It is very important in outline work to keep the stitches as far as possible of the same length, and to follow the outline ex.
actly. An irregular, waving line has as disagreoable an effect as a weak line in clrawing. Judgment also must be exercised in turning corners, working foliage, etc. The distance must be measured with the eye, and the stitches so adjusted as to avoid a sudden shortening or lengthening of the stitch. Care must be taken, too, to have the ontline lie perfectly flat. Too loose a stitch will give a slovenly appearance; too tight a one will draw up the material. Always work with a short thread, as otherwise the silk or crewel will inevitably become rough. Avoid making knots in the back; a little practice will enable one to begin and end a line so as to look neatly in the back. Never work with too small a needle, as it will drag the material, and produce an uupleasant effect. A Kensington needle is the proper one to use.

One great advantage which outline work possesses is its adaptability to so many articles of every-day use, and the good results which are attainable with a comparatively slight expenditure of time and money. For outline work the less expensive materials should be selected for foundations.

A good piece of work to begin with is a set of d'oylies, for which designs like Fig. 1 are well adapted. They may be worked in linen sheeting-that a yard and a half in width cuts to the best advantage. For a dozen d'oylies you will need half a yard and one inch. It is far better always to shrink washing material before working it. This is best done by washing it in hot suds, rinsing it throngh two waters, and then boiling it for ten or fifteen minutes. Rinse again in cold water, dry, and iron until it is perfectly smooth. Cut by a thread into small squares, a quarter of a yard each way. They should be fringed all around about seven-eighths of an inch deep, but it is best to do this fringing when the rest of the work is completed. The edges of the d'oylies should be hemstitched, so as to hold the fringe in place. 1
narrow border of drawn work, the directions for which will be found under the head of drawn work, will be a great improvement.

Having transferred the pattern (which in case of the fans should be placed in the corner, according to one of the methods given elsewhere), the next question is, "With what shall it bo worked?" If the linen is heary crewels may be used, although a better effect will be obtained by using etching silk or filoselle, a kind of silk which is inexpensive, works easily, and has the merit of not fading. Marking cotton is also sometimes used. As to color, that must be left, in great part, to the taste of the worker. Monochrome, that is, work in one or more shades of a single color, is always a safe, and to many tastes, the more truly artistic treatment. If, however, several colors are used, one rule is imperative, never use more than three bright shades. The more sober tints may be used in greater profusion.

Outline embroidery can be varied by using it in connection with appliqué work. For a watch pocket or small banner screen for a lamp, the desigu could be worked in outline on silk, then cut out and appliqned on a piece of felt, the edges being button-holed or chainstitched with gold thread.

As an instance of what may be done in this way, I quote a description of a tidy which an eminent authority on decorative work describes as "simple and unassuming, but in its way artistic."
"One of these was a long strip of Momie cloth, intended to be thrown over the back of a sofa. On this three ducks were worked in outline in brown crewel. They were standing on a brown ground, which was represented by a piece of brown cloth, applied to the gray; in one corner, up above the ducks, was a large, very much conventionalized sun, manufactured out of yellow cloth, and the rass worked from it in yellow silk."

Desigis for outline work may be found in great numbers in the periodicals of the day. "St. Nicholas is,"" as au enthusiastic roung friend once said, "a perfect mine!"

Powdered designs hare been very popular. In this style of work a plant form is takeu as the foundation of the design, and varieties of this form are scattered apparently carelessly over the entire material. Take the rose as an instance. Here will be a leaf, there again a small spray; a rose-single, for double flowers are out of place in ontline work-or perhaps a bud, will be worked at seemingly irregular distances; but these must all be arranged carefully so as to balance one another, and present a liarmonions effect. It is just the difference betreen disorder and "pleasing confusion."

Lately a molification of this design, called "crackle work," has become popular. In this work the powdered flowers, leaves, or finit, are comecterl by straight lines meeting each other at varions angles. I saw at the rooms of the Society of Decorative Art, the other chay, a set of charming doileys, worked in shates of silk in this way: They were worked on exquisitely fine linen, and bordered with drawn work. Bureau and buffet searfs may be decorated in this way, either by working the erackle work over the entire surface, or with a border of work at either end. Care should be taken not to draw the lines too closely together, as boldness is an essential in these designs. The idea, like so much of our decoration, comes from Japan, and is said to have been suggested by the effect produced by plum blossoms, nipped by a late frost, falling on thin and cracked ice. It is an illustration of how Nature, closely studied, will reward her votaries with many an unexpected gift.
A useful present for a gentleman is a pipe rack. It is made of a piece of linen lined with some brightly colored silk, and suspended frem the wall by three ribbon loops.

At the top outline two interlaced pipes, and below, quite in the centre, fasten on a band of some stiff material, divided into compartments by rows of strong stitching.
To protect a handsome sofa pillow, a charming and serviceable cover can be made of a square of linen, edged with lace, and bordered below the hem with a drawn work design. Divide the centre into smaller squares by bands of drawn work. Powder the small squares with tiny elover blossoms and sprays. A good effect is sometimes produced by working the blossoms solidly (directions for which work will be found in the chapter on that subject) and outlining the leaves.

Bands of Turkey red or blue denim, form good backgrounds for etching:, in white linen floss. The band can be feather-stitched on fine ubbleached crash. Kate Greenaway figures are very appropriate. Sometimes two of these bands are used, the space between being finished in drawn work, or in daned work in red or blue washing cotton.

A tea tray cloth is a pretty addition to the tea table, and is also useful when the tea tray is brought into the parlor. They may be made like scarfs, worked only at the ends, or tesigus can be worked in the corners or the centre. Drawn work is often used in these eloths. Appropriate desigus are cups and saucers, tea-pots, ete. Decorative patterns should be sketched on the cups, etc. Floral and geometrical desigus are also used. Those who do not renture on desiguing, may find damask tea-cloths and doileys with pretty woven borders. By outlining the pattern in silk, a handsome set may easily be furnished.

A case for a night dress may be made of gray or creamy linen. Divide the lower half of the front into two panels by a row of ornamental stitches. In the lefthand division draw a fignre in night clothes, candle in hand, and yawning. In the second a reclining form,
with pillowed head and closed ejes, with insects, beetles, moths, etc., whirling in the air. On the flap, outline in Roman letters, or in simple round text, "To sleep, perchance to dream." Finish with a bow of ribbou. Or the case, which is made in the shape of a large envelope, might be pordered with poppies and their leaves.

A bed-spread may be made of the same material (the cream color being preferable), decorated with an outline design of poppies pordered orer the material, flowers, seed ressels and foliage all being used and comected together by conventional or flowing stem work. Indian red is a good color in which to work this. The Egyptian water lily or lotos is also emblematical of sleep, and may be used in the same way. Dull blues would be appropriate for this design. Pillow shams should be made to match. Should this seem too great an modertaking, the decoration of the spread could be limited to a diagonal band of proper width, defined by rows of chain or ontline stitch, the space within the band being pordered as deseribed, or the flowers and foliage could be formed into a continuous design, more or less courentional.

Here is an idea for another comnterpane, say for a crib. Divide the linen into squares with some pretts fancy stitch, working in the centre of each square a flower, or one of tle many appropriate pictures to be found in the Kate Greenaway books or in Walter Crane's "Baby Opera." You need not reproduce every line; only those that are necessary to tell the story completely.

A screen is often a useful piece of furniture. Here is a description of a simple one, suitable for a bedroom or nursery. The frame should be a firm one, and can be made by any carpenter of pine wood. It can be either ebonized by staining it with a solution of logrood, and afterwards applying vinegar in which iron has beeu
lying for some time, and rubbed to a dull surface after it has been treated to a coat of varnislr ; or it can be painted black and decorated with a few dashes of gold paint in a vague Japanese style. For the screen itself, use unbleached muslin. Having measured it to fit the


Fig. 3. screen, put on a dado of dark blue cambric, proportioning it duly to the height. On the upper part, sketch a Japanese gromp, such as you can find on many of the advertising eards and fans. Or, if this seems beyond you, powder the blue mnslin sparingly with outline plum blossoms (you will find a suggestion in Fig. 3), and run a branch up beyond the dado in the manner of the illustration alluded to.
Fig. 4 is a screen in which the work is of rather a novel character, being a combination of painting and embroidery, and is much more quickly worked than one would think. Sketel the design, enlarged to suit your sercen, on the material, which in the original is olive satin, making the outline delicate. Have yom work, stretched firmly in an embroidery frame, whieh may be made on the same principle as an old-fashioned quilting frame. Figs $4 a$ and $4 b$ give enlarged details which will enalle the worker to clearls understand the directions. Gold, silver, copper, and black paints are userl, mixing them whels they need diluting with grom water. Paint the
stones, grasses, leaves, flowers, and the stalks of the cactus in gold, shading lightls with black or copper color. Make the thorns of fine strokes of copper color, and then worked with a loose lying stitch of moss green filoselle or floss. Gold thread can also be used with effect. Where there are well-defined leares as in Fig. 3,


Fig. 44.
they are painted in silver and reined with stitches of green. The flowers are worked with two shades of dark red in a close satin stitch, the calices being in white or rellow. The bird's beak is painted in gold, as also are the upper part of the wings, the lorer feathers being painted in silver and bronze, divided by stitches of white
silk. The breast is covered with button-hole stitches in claret red silk, so worked as to catch into each other, imitating the plumage. The upper part of the wing is also worked to show the markings of the feathers. The long tail feathers are worked in gold thread.

A cover for a parlor organ can be made of linen, with the design either worked on a band of blue denim, which is afterwards feather-stitched on to the cover, or else worked on the material itself. Bars of music with lines


Fig. $4 a$.
and notes in gold silk, and the rords "Hal-e-lu-jah! hal-le-lu-jah! A-men!" worked in the same silk wonld form an appropriate border; or one composed of musical instruments, such as lyres, reeds, trumpets, and cymbals, intermingled with scrolls, might be used. Symbolic flowers, such as the palm, lily, or passion flower, would also be appropriate. Finish with a deep hem-stitched hom, with a line of open work above, or with a knotted
fringe in which blue and gold silk are mixed with the linen threads. Line with deep blue silesia.

Chain-stitch is not much used at present; but for some purposes it is very conrenieut. It is made by taking a


Fig. 4b.
stitch from right to left, and before the needle is drawn the thread is carried under the point of the needle from left to right. The next stitch is taken from the point of the loop thus formed forward, and the thread again kept under the needle, each link thus forming a link in the chain.

Toisted chain stitch (Fig. 5) is useful for outline work


Fig. 5.
on coarse materials such as felt, and other heary woolen
goods. Instead of beginning the second stitch inside the point of the first, both threads of the first are pashed a little aside, and the needle is inserted about half way up the first stitch, thus securing a rope-like effect. It should be worked with double crewel or tapestry wool. It is also very effective worked on gold-faced felt, in double silk, and both chain stiteh and twisted chain are useful for edging appliquéd patterns.

## DARNED WORK.

In combination with outline stitch, the darned work so popular in Queen Anne's time has been revired, and is remarkably effective. The stitch is, as its name implies, the one used in darning cloth or stockings, only that it is made purposely inregular, being quite long on the right side and very short on the wrong side. It is used not ouly for backgrounds but also for filling in boldly outlined designs. Says a writer in the Art Interchange:
"Judiciously used, it is capable of producing almost iridescent effects, and adding greatly to the richness of the embroidered work. Done in heavy filoselles-and lineu talkes these admirably-in two shades of one color, in two colors, or else in a shade lighter or darker than the fabric, it will produce several color effects. The colors may be introduced irregularly or alternately, by stitches of varying length. A combination of dull greeu or dull gold filoselles, will produce three, if not four color effects, ącoording to the ground, and the light in which the work is shown; in one light there will be a shading of dull green, in another a tonch of old gold, in a third a glimmer of bronze green. When deeper, fuller coloring is employed-for instance, in rich antique blues, and old bronze-the changing sheen of peacock's feathers will be seen. In two shades of gray silk, silvery and steel effects are attainable; in dull pinks and ambers,
prrple and citrine, green and russet, pale violet and lemon, and other combinations, the most lovely transformations are wrought by this simple grommdiug. Where damed work is used for filling in ontlines, the design should be so composed that the unworked spaces may present ornamental shapes, for they will attract the eye, and hold as important a part in the finished work as Hower and leaf spaces on a damed backgromnd. In daming within the ontlines, it is not necessary to darn the whole composition, though it may thas be treated amd stand boldly ont on a plain batekgromnd with artistic effect; certain portions all thriagh the design, say the blossoms of an apple or chery design, may be simply ontlined and veined in silk or crewel, while the finit and leaves are darned in one or two colors, or shades of color. Gare mast be taken to so distribute the damed or open spaces as to aroid striping or spottiness. As it not possible to follow natare in romm effects by darned work, which is conventional, it is best to use comrentional coloring, or else, low tones of tha matmal color of the smbject. Light gronmels look lest with a well diffused design, and dark grounds well with the design wronght in silk of a lighter shame than their own color."

The Art Amateur thus despribes a remarlable tablecover worked by the Deromative Neodle-Work Soriety in London:-
$r$ " la looking at the picture, many persons imagine that the cloth is embrodered with silver; hat this is mot the case, the heantiful, bright effect heing prodnced hy very simple means. The material is rream satin, and the design is ontlined in blue and green silks, while the ground of the pattern is filled in with darning, in shades of pale gold filoselle, thins leaving the satin to cateh the lights. The border is of green plush, on which is embroidered a handsome antique pattern, harmonizing with and relieving the centre."

Pongee is a beautiful material for darning. It is much used for tidies or chair backs, as they are now called.


Fig. 6.
An exceedingly pretty one at the Decorative Art Society hat a border formed hy a floral design outlined in pate
green, with yellow berries, the background being darned in a darker green. In another, the outlining was done in old gold, and the darning in stades running from a dull red to pink.

A remarkably pretty and simple border can be worked on fine burlaps in red. Sprays of the sassafras form the design, which is outlined in a dark red, with a backgromd darned in a brighter shade of the same color. This scarf was finished will a knotted fringe, while above the border was an inch wide strip of drawn work. The same idea would be rery pretty for a heading for curtains. The modern daned work is principally used as a background in straight, horizontal stitches, but these may be varied according to the iuclination or taste of the worker. It is sometimes used to represent a diapered gronnd; thus, it may be worked in an open diamond patteru. Again, it may be worked in rows of circles of either varying or uniform size, or in a succession of wave-like lines. Instead of the darning stitches, some fancy stitches may be used for filling in a background. Water, clouds, etc., are geuerally rendered by darning stitches.

Fig. 6 is a curtain of Queen Ame's time done in ontline with a darned background. A very handsome quilt may be worked from the same design on huckaback towelling. The easiest way to manage it is to work a square for the centre and join side pieces all around. The darning stitches have a very fine effect run under the threads of the towelling.

Fig. 7 gives another suggestion for work of this kind, showing a different way of filling the background. As shown in the illustration, a pleasing variety may be introduced by filling in the background in one part of the work, and the design in another. Very gorgeous effects are produced by using gold thread in darning denigns on haezaback,

## FILLED IN EMBROIDERY.

Under this head a unmber of stitches and various modes of treatment are included, but the stitch chiefly used is the one already described under the head of outline work, being merely a modification of stem stitch, the whole design, however, being covered with needlework appropriately colored and staded. Much of this work is done in coureutional desigus, the coloring of which is also conventional, but for the beginuer the semi-realistic or natural designs are much easier and as a rule more satisfactory. There are a variety of stitches that may be employed in this work, which I will briefly describe. Of these, one of the most important is feather stitch, which is the one generally employed in shading Howers, etc. It consists of an alternate long and short stitch. The stitches must not, however, terminate in regular lines, as this would give a stiff appearance to the work. In working the petals of flowers, you must always work from the onter part of the petal toward the centre (Fig. 8), and so directing the stitches as to


Fig. 8.
follow the lines of the petals. It is a good plan to keep two or three needles threaded with the different shades, and work them in as required. It is often a good plan to work the whole of a leaf or petal in the shade that is predominant, makiug the stitches a littlo spreading, so
that the other shades can be worked in afterward. When finished, the shades should blend into each other, showing no harsh outlines. It is much better to begin working in the middle of a leaf or petal, and throw your thread to opposite sides of your needle in the two halves. In working leaves, study their formation and direct your work accordingly. In a chrysanthemum or oak leaf, for instance, it is easier to treat each division ans a separate leaf, beginning at the top of each and working down toward the main stem, so directing your stitches meanwhile as to join the parts harmoniously. It is an excelleut plan to keep a sampler ou which to try stitches and effects of color. In working flowers with petals closely set together, as the chrysanthemum, corn-flower, etc., it is sometimes necessary to divide the petals by a line of a darker shade. This should be put in the last thing, as otherwise it is liable to be lost in the work. This holds true of veinings also. It is well to remember that needle-work is decorative mainly, and shonld not be elaborated like a painting. Two or three shades, are as a rule, sufficient in leaf or flower, and where either is small a single shade may answer. Narrow leaves look best worked in satin stiteh. The centres of many flowers are worked in what is called the French knot. It is also used for working the anthers to some flowers. To make it, having brought your needle through the material at the spot where your knot is to be made, wind the thread three times round the needle close to the spot where the thread came through. Then turn the point of the needle down through the place where it first came up, holding the thread firmly in the left hand until it is quite drawn through (Fig. 9). The twisted threads must be held very close to the work, or the knot will have a loose, untily appearance. When the work is coarse, the thread can be doubled or the number of knots increased. In filled in ombroidery, as

With outlin work, the materials are very much the Worker's own choice. Orewels and silks are chiefly used for working, and may both be used to great advan-


Fig. 9.
tage in the same piece of work, the design being for the most part worked in crewel, the high lights put in with silk. Fine chenille also can sometimes be used with great effect, as, for instance, in working golden-rod, which can be worked very effectively and expeditiously in two shades of yellow chenille. A new thread should always be begun on, the right side of the work and finished there also.


THg. 10.
A very effective stitch for a certain class of designs is shown in Figs. 10 and 11. It has a great number of names, such as leaf stitch, Kensington stitch, Janina stitch, etc., etc., and is described iu


Fig. 12

Caulfield and Saward's "Dietionary of Needlework," as Mossoul embroidery. As will be seen by studying the illustration it is really a close herring-bone stitch worked across the leaves and petals. Commence working at the widest end of the leaf or petal, and work across from


Fig. 13.
side to side without a break. The stitch, if worked properly, produces a platit down the centre which is the chief feature of the work. When worked, the design should be outlined with rope stitch, which is a short stem stitch. The outline should be of an uniform color, slightly contrasting with the colors used for the design. Thus,
if the design be worked in yellow-greens and brownreds, the outline might be dark peacock blue. Oramge shates in the design might be ontlined with greens or russet browns. An appropriate border wonld be one of drawn work using the same silks as were employed for the embroidery. This stiteh or a modification of it was used largely by the New England dames of old, and is sometimes called from that circumstance, Grindmother's stitch.

A beantiful sofa enshion worked in this stiteh, is shown in Fig. 13. The pattern for the border is given in full size in Fig. 12.

Another stitch for working narrow leaves is slown in Fig. 14. It has, like Janina stitch, a formal look, and should be chiefly used for courentional desigus.


Fig. 14.
In working the different stitehes so fir described it will sometimes be fonnd that the work is puckered or dawn. This is particnlary liable to be the case with begimers. In some ases it will be suffeient to cover the right side with a clean cloth, and then streteh it tightly right side down hy means of pins on a tahle, and then thoronghly dampen it on the wrong side. If very bally wrinkled, it may be advisable to pass a hot flatfron rapidly orer the wrong side. Of comse, care must
be taken to only dampen, not wet, the material. I have generally found it most satisfactory to wring a thin cloth very tighty ont of cleal water and pin it orer the wrong sille of the work. If an iron is used great care must be taken mot to hare it too liot, so as to scorch the work.

Couching or laid embroilery is chiefly userl for ecclesiastical or conrentional designs, and must be worked in a frame. The leaf or petal is first coverel with lines resembling satin stitch, but lying almost entirely on the right side. Orer this, lines are laid at regular intervals and caught down by a few small stitches from the back.

Conching can be varien in many ways, either by lay. ing the conching lines at different angles, or omitting them altogether; the fastening threads can be made to form ummerons figures, such as diamonts, squares, zigzage, etc. This is called diaper conching. Gold thread is used with great effect in this style of work. When the couching lines are made of a heary material, such as corl, ribbon, or coarse trools, a stiletto must be used to make the holes throngh which the lines are taken to the back of the work.

Conching must almays be done in a frame. Convenient patented frames can be procured in many cities, but very satisfactory ones are made of four pieces of wool fastened together at the corners by pegs. The work is fastened to the end pieces by sewing it to strong linen seenrely attached to the wood. These end pieces are then fastened in place by means of the pegs, aml the sides of the work tightly and erenly fastened to the side pieces of the frame. The work must be rery tightly stretcherl or it will soon beerme difficult to work it nicely. Shonld the material he too light to admit of stretching it firmly, stretch a piece of strong linen, and pin the work firmly on it. Both hands are employed when working in a frame, one above and the other below the
work, and practise will enable you to work with either. Care should be taken to keep the frame in such a position that the worker will not be obliged to stoop.

Very much of the beanty of all varieties of embroidery depends on the harmonious arrangement of the colors, and this cannot be tanght in any mannal. To some, the color seuse scems utterly, or in large part, wanting. Such can only copy. But with many a few hints will start them on the right road. In embroidery, the coloring must always be largely modified by the smronndings of the design, the background, etc. While the design should always be so far conventionalized as to be perfectly flat, the colors must often be still further conventionalized. The following remarks from the Art Interchange Munual on "Filled in Embroidery," will prove suggestive:-
"In coloring in decorative embroidery, mity and harmony are more desirable than contrast. For a begimner especially, unity should be the aim; contrasts are very fine, but they can only be correctly carried out by those who are skilful with the needle, and who have a natural taleut for, or have had experience in, the use of colors. It is better to begin with two shades, and to use those correctly, than to attempt the mixture of a variety of shades and limes."
"There can be as well defined unity in coloring as in designing an ornamental pattern. One scheme of color can run through an entire design. As a Hower or leaf in the drawing is taken as a centre around which others cluster, so a color can be selected as the central point to which all the shades must relate. To follow ont this idea, we will suppose curtains are to be made of a peacock blue fabric. Blate in this case would be the ruling color, and all the greens used in working on it must be bluish in hue; if a flower be added to the pattern, it must represent the primary in its purity, and no colors
formed of red or yellow must be introduced. If maroon is the ground tone, the greens must have a russet hue, and the flower must be red. This method of coloring is capable of raried and exquisite treatment."

When a closer imitation of nature is attempted, the natural colors must be used in working them, and great care most be exercised in choosing a backgromnd, as carelessness in this respect may ruin a piece of work otherwise well designed and wrought out. A friend, wishing to ornament a dark bhe flanel dress inexpensively, bethonght her of working a simple design in crewels on revers and cuffs. She worked a small flower in orange shades, and the result was-well, the reverse of refined; substituting shades of dark red, her embroidery became an ornament, as it was inteutled to be, iustead of attracting the eye by its "loudness." The authority already quoted says on the subject of a back-ground:-
"There are a few other facts in the science of color" which can be an assistance in the selection of a background. We are told that no 'one color can be viewed by the eye withont another being created.' This is becanse the eye requires that all three primaries should be present; and, when this is not the case, it will of itself supply the defieiency. To exemplify this, let us suppose we worked a blue pattern on a nentral gray ground. The eye, in looking at it, would create the missing red and yellow; and as these in combination form orange, the grayish ground wonld hare an orange hue. This is an important fact, and inattention to it will result in very serions defects. We often wonder why a piece of work which has for its fom or dingy, when we may have taken great pains to select a rich, perfect black. The reason is, that if the design is worked in blue, orange is reflected on the black; if in red, a greenish hue is given; and in yellow, a purplish
hue is the result. This difficulty is obviated by selecting for the ground work a dank shatle of the same color as the pattern; and when this is almost invisible, its color becomes nentralized by the tints thrown upon it, and it gives the effect of black. When the pattern is variegated in color, this difficulty will not ocenr."

Great cure must be used in working designs containing different colored flowers, to choose such as will harmonize with each other. The greens of the leaves also must be selected with regard to both the background and the colors used for the flowers. Thus, yellow and blne flowers should have the leaves worked in russets and brown-greens.

In shading, as has been intimated, no attempt should be made to give a romuded or realistic representation of the flower nsed in the design, but merely an indication of the raried shades of color, as in the rose for instance, which often raries from a deeppink to so delicate a tint that it is almost white. Great care must be taken to have whatever shanling is employed, worked so that in no place can the point where one shade begins and another ends be pereeived. In this matter everything depends on the skill and taste of the worker.

It is well in beginning such work to undertake only small pieces, such as chair backs, table searfs, ete., so that discomagement mis be aroided, and failures mas. not be so disastrous. But to a skilful and perserpring: worker it is well worth while to pht the time and pains into one large piece of work, which is often frittered array on a rast mumber of smaller undertakings. The work is so durable, in fact improves so with age, the colors becoming mellow with time, that an enthusiastic work-woman may well feel she is working for posterity, as she bends yer her portièe, screen or curtain.
For convenience sake borters are often worked in strips, and afterwaxds applied to the foundation. In
this case a mumber of fancy stitches are often employed, not ouly to conceal the line of junction, but also to emphasize the desigu or to bring into harmony the two colors of the strip and the real foundation. Several of these stitches are describued later on, and many more can be found by carefully noticing borders on embroideries, china, or any other decorative work. Herringbone and coral stitch are both used for this purpose. Mrs. Glaister says concerning these stitches:
"A great deal of the finished effect of all decorative needle-work depeuds on the apparently mimportant lines and borders with which the patterns are bounced and kept together-often they have to be put in after the work is otherwise fiusished; a thick line and a thin one, a little zigzag or herringlone betmeen two lines, a row of dots or sloping stitelies beside a line, will often make a marvellous difference to the finish and completeness of a pattern which without them gave a vague dissatisfaction. These lines sometimes serve to give a balance of color that was wanting withont them. Speaking very generally, middle tints of the ornament will serve for the color, but if, as happens sometimes, the color of flowers is felt to be a little strong in the general effect, a few stitches of their color in the bordering lines between or heside, say the green of the leaves, may greatly improve matters. Lay some threads of the worsted or silk you may be using on the cloth beside the. pattern, and your will readily judge the effect."

As I have said at the beginning of this chapter, veriv many more stitches might be emumerated, but they would add nothing to the practical ralue of these directions and might serve to embarass. Every worker in decorative needle-work is at liberty to adapt and morlify her stitches to suit herself, studying only the result she is aiming to produce.

As a rule, borders are the most desirable decoration for table covers, as the folds into which they fall are apt to break or conceal entirely a corner piece, while a group of flowers is apt to be disagreeably obtrusive if worked in the middle of each side. Generally a square table cover is preferable, but I have seen very pretty covers fitted to romblables. One of these was of sage green felt, on which were embroidered ategual distances,


Fig. 14a.
on the round piece fitting the top of the table, sprays of simpie wild-flowers in small vases. The vases were cut from black velvet and applied to the eloth, the outline and ornamental lines being worked in gold colored silk. Almost any book on antiquities will give a good model for such vases. The borter of the corer was worked in a running floral pattern on a straight piece of cloth, and sewn on to the top. It is well to line this straight piece
with a lightly quilted piece of thin muslin, having a light piece of wire attached to the lower edge. Finish with a fringe containing the colors used in the woik,

Fig. 14a illustrates a waste-paper basket trimmed with a lambrequin or drapery of felt, satin or plush, worked with a floral design. The lambrequin is finished with a border crocheted in wool, from one of the patterns given in the chapter on crochet, and with tassels.


Fig $14 b$.

Another style of basket, which will be found useful for holding newspapers and magazines, is shown in Fig. 14b. The sides are covered with a puffing of silk or satin, and decoraterl with a panel of either of these materials, on which a floral design is worked or painted. An expeditions way is to paint the design in flat tints, (that is withont shading) in water colors, and to edge the outlines with silk in cording stitch.

Reference has been marle to appliqué work. As its name implies, the decoration is produced by cutting the design or its main features out in one material, and then fastening it on to a ground work. The erlges are then conceated by chain, batton-hole, conching, or some other fancy stiteh. Sometimes it is alvisable to back the appliqué desion luefore fastening on the ground-work, in order to insure its being perfectly flat and numrinkled. In this ease the material nsed for the gromud should be tightly and evenly strained, amb the design having been traced on the hacking material (which should he of unbleached linen erenly stretcherl), the cut-ont pieces to be used in the trork are pasted on this limen gromm, eare being taken that the stuff goes in the same direction in both tire pieces for the design and in the backing. The following paste is userl for appliqué work, and also for pasting the batsks of some pieces of embroidery designed for screens, ete.

## Embroidery Paste.

"Thece and a half spoonfuls of flom, and as much powdered resin as will he on a half penny. Mix thoroughly with half a pint of water. Pat in one teaspoon essence of alores, stiming till it boils. Boil for tive minntes.' - Lamly Marian Alford's Manzal of E'mbroidery.

A new way of making np a sofa pillow is shown in Fig. 1te, the covering of which is of phash, lined with satin, tut abont fonteen inches longer than the pillow, and contined at either emil hy a cord and tassel. The decoration consists of sprays, worked on linen in filled-in emlomolery, and applied to the phash. These sprays can be bought ready worked.

When applique desigus are cut from plain colored material, sueh as felt or satin, they may be much
improved ly working them in crewels or silks, veining the leaves, shading a little, etce.


Fig 14c

Fig. 14d illustrates a brush or broom holder or small catch-all, ornamented with a spray of appliqué work, and finished off with gimp, wool, balls and tassels. The way to make these balls is given on muder Crochet.

A quickly executed aus effective kind of embroidery is called Broderic Perse, and is very pretty for tablescarfs, berlroom curtains, ete. For a table scarf use a good quality of crean-colored linen. Yon will need besides some cretomne in bright, artistic, flower designs, together with some filoselles and crewels. From the cretome cut a sufficient number of flowers, and arrange themju a gracefnl border pattern on the linen, connecting them with stem lines in pencil. Haring arranged your battern, mark lightly romd each flower so as to insure youx rearanging them correctly Then stretch your linen by means of stont pins or thmmb-facks smoothly on a drawing-board (the knearling-hoard will answer), and with nice smooth starch, paste each flower
in its place. When thoronghly dry take the linen off the board and buttonhole the cretome lightly round the


Fig. 14d.
edges, laving the stitches seen as little as possible. Veinings of leares, high lights and the deepest shadows can be worked in with filoselles, and the stems are worked with crewels. Nice cheese-cloth can be decorated in this way for curtains. As to outline work, the present fancy is to work it in conventional colors, using three shades of a color. Thus, in a floral desigu the leaves are worked in three shades of green, and the flowers in shades of blue, pink or any other color. Another way of varying this work is by the use of "double ontline." Insteat of working the outline as usual, what is generally called Kensington stitch is used; that is, the eflge of the flower is done in alternate long and short stitches, just as if the whole flower was going to be filled in. The effect is very pleasing.

Old fashioned or partially worn out broché shawls can be used very adrantageously for this appliqué work, by cutting out the principal figures of the design, and applying them to an appropriate ground-work.

Very pretty mats can be made of appliqué work. Use burlaps or brown Turkish towelling for the mat, and


Fig. 15.
on that apply leares cut from green, brown, and red flannel, or merino. Germantown wool or zephyr may be used to work them. Either powder the mat with the leaves or arrange them in a set pattern. Button hole them down, and work reins, stalks, ete., with long stitches. Finish at the ends with red flannel nrmamenter with Point Rasse stitches, and line the whole with a piece of hemp or ohd Brissels carpeting. I hase seen such a
mat, in which the colors were well chosen, used to corer up an masightly window. On each side was hung a brilliant Japanese panel, and the whole was crowned with Japanese fams, making a pleasure of what had been an eyesore.

Figs. 15 and 16 are designed for sereen panels to be worked in erewels or silk; or they may be painted.

l'ig. 16.
Combined, these designs womld be very appropriate for a wall protector, to he worked in outline.

Embroidery in crewels or silk should be washed in lomat water, and well rimsed.

Many recommend washing siks before working. To ?o this they shonld be cant into lengths and boiled in soft water for five minutes, then skimmed ont on to a
soft towel to dry; sullicient cremels or silks should be purchased to last through the work as it is often extremely difficult to match the shades exactly.

A very pretty "all over" design for a elaair-back or tidy is shown in Fig. 17. It ean be worked in ontline on a darned backgronnd or in filled in embroidery.

( Whand
Fig. 17.
But fer patterns are given in this chapter for the reason that the space is ton limited to give working desigus, and new patterns ready for working are so easily procurerl. Originality is a great beanty in such designs, and when they are met with in a manual, the eye soon becomes weary of them.

Perforated patterns with the materials for stamping ean now be bought for a mere trifle, and the work done from them will prove more satisfactory than when your design stares fou constantly in the face from the pages of a book.

HOLBENN STITCII, POINT RUS\&E, TICKING WORK, ETC.
Holbein stiteh, so called becanse this style of orament is fonnd in Holbein's painting, is in reality only


Fig. 18.
a modification of true Point Russe, the latter name having, however, been applied to a quickly executed and sketchy kiud of work. In what is generally called Point Russe, the patterns are all designed to suit the stitch, that is, they have sharp and frequent angles. To work it, bring the needle up from the back of the work at one end of a line, and put it throngh to the back at the other end. The whole design is thus worked in straight lines. If a line is too long to work neatly with a siugle stitch,


Fig. 19.
divide it into two or three equal lengths and work each division as a single line.

The peculiarity of all the real Point Russe is that it presents the same appearance on both sides of the work, which makes it a rery useful stiteh for decorating' towels, and other objects which are seen from both sides. Designs for Holbein stitch must always be arranged as for cross stitch, and if worked on material in which counting the stitches is diffienlt or impossible, must be worked over canvas basted on the material. The principle on which this stiteh is worked, is that of
working over two threads amd muler the two following, reversing the armagement as ron eome back. Sometimes the design is worked so as to present the effect of ordiairy cross stitrh, sometimes the stitch follows the outlines of a small square. The designs (Figs. 18-20)


Fig. 20.
show in what direction these stitehes are to be taken, but the principle is always the same; where the thread comes on the right sirle in the first working, it must be on the wrongs site in retming.

Strong reds and blues are the most appropriate colors
for this work, black being sometimes combined with them. Any good cross stitch border will give a pattern, and as the work is done over threads no stamping is needed. Holbein stitel is generally usod in connection with drawn work. In fine material baste a piece of canvas on, and work orer it, drawing out the threads when the work is completed.

## RAILWAY STLTC'II.

Designs for this stitch should always be of small flowers and leaves, such as daisies, etc., arranged in detached sprays. Trace them lightly. Commence to work from centre; and make each petal with one stitch. Bring the needle up from the back and put in close to where it came ont, holding thead down with left hand, and bringing it out at the point of the petal. Draw ap, making a long loop held in centre hy the drawn up threal. Put the needle down again just ontside the loop, thus making a rery small stiteh at the end of the petal; rin the needle ont at the middle of the flower, and repeat. Finish the centre with French knots or button-hole stitch, or pierce with a stiletto. The leaves should le made with a single railway stitch. Fig. 21 shows the manner of working this stitch in comnection


Fig 21.
with herring-bone. The centre of the flower is worked in French knots.

## A SHOE BAG.

Cut two pieces of ticking, one seventeen and a half inches long by fifteen wide, the other eleven inches long by twenty wide. On the longest piece, which is the back of the bag, the braid need only be put on for seren or eightinches, as the longer part is hidden by the front piece. Having stitched on red braid on the alternate white stripes, work the meovered white stripes with fancy stitches, arranging the colors as follows:-First, yellow; second, brown ; third, sreen; fourth, brown; fifthyellow; sixth, blue. Now begin again with yellow, ank repeat the colors in the same order.

Work the stripes in herring-bone, feather, and other fancy stitches. Bind the top of the short piece with braid, and stitch a piece of braid across the bottom of the work on the longer piece to conceal the raw edges of the work. Divirle each piece into three equal parts, and baste the front to the back at these divisions, stiteling them firmly down. Then lay the fulness.thus formed into three box-plaits, forming three pockets, and baste the bottom edges together. Bind the whole bag round with braid, and make three loops by which to hang it up.

Handsome chair and table-corers, bracket and mantel draperies, can be matle of ticking by using narrow velvet and embroidery silk instead of braid and worsted. For a table cover, work a square piece for the centre. The border shonld be worked in long strips, each as long as the side of the centre piece, and twice the width of the strip over. Sew the long strips to the centre piece, letting it project an equal distance at either end. Baste the corners together with a slanting seam, which will make the border fit perfectly smooth. Cut aray the superfloons cloth and stitch the seams firmly; cover the joining of the border to the centre with relvet, and finish the edge with a chenille fringe, or with a row of relvet.

Catch-all bags made of four pieces, square at the upper end, and cut to a point at the bottom, are very useful hung near a sewing machine. They sho:ld be finished with a tassel from the point at the bottom, and kept open by a piece of rattan or wire run into a sheathing at the top.
Fig. 22 gives a good idea of the plainer kind of ticking work. Where the stripes to be worked are wide enough


Fig. 22.
fiowers worked in railway stitch may be used. Some of the French tickings come in stripes of varying width. A fer stitches useful in this work are here described.

Tite de Bouf-is so named from its fancied resemblance to a cow's head with the horns attached. To work it mark very lightly a line down the centre of the stripe, or run a basting thread to mark it. Make two slanting stitches meeting at the bottom on the central line. Bring ont your needle (after putting it through to the back in making the second slanting stitch), near the bottom of the left hand stitch and on the upper side. Holding your thread as if making a chain stitch, put your needle in at the same position on the right hand side, and bring it to the front again on the central line about one quarter of an inch below the slanting
stitches. Pat your needle to the back of the work just below the chain stitch, thus holding it in position. Repeat this stitch at regular intervals.

Wheat Ear.-This is worked ou a straight central line. Work a chain stitele (rather long), and take an upward slanting on either side. In making the slanting stitches, bring the needle out inside the chain stitch.

Ship Ladder.-Make a_straight stitch a quarter of an inch in length; bring out your needle on the right hand side a little above where it went in, and one quarter of an inch off. Put it in on the left hand of the straight stiteh, a little below and about a quarter of an inch away. Bring the needle out at the end of the straight stiteh and repeat.

Lattice Stitch.-This is useful for filling rather wide spaces. Work fire slauting stitches across the stripe, about a quarter of an inch apart, and cross them by five stitehes worked in the opposite direction, interlacing the threads as you work. Miss a quarter of an inch and repeat.

Persian Cross-Stitch.-This is a long slanting stitel crossed by one one half as long.
work basket in tiching work. (Fig. 23.)
Cut four pieces of ticking, shaped as in the illustration; in the model these pieces are eight inches long measuring from the point, and the cardboard fomblation is ten inches square, but with the corners rounded eff. Having worked your ticking, sew it on, together with it silk inner lang, to which the tieking work must be eanght by carefully hidden stitches. Work a hamdle and fasten on. The fancy edge is crocheted from silk as follows:Crochet a fommation row of the necessary length; then work-
1st. Row: 9 chain, pass over four loops, one double in the next. Reprat.


Fig. 23.
2l Rons: Three donble in the three centre stitches of the nine-chain, three picots (of five-chain, one single in the first.) Repeat.

## PAINTING IN OILS.

Color, however brilliant or charming, can nerer disguise bad drawing, nor will time, which may tone down and mellow too glaring or vivid coloring, lend any disguise to faults of drawing. An old Italian proverb may be freely translated:- "If time corrects painting, it does nothing for drawing." But if you wish to begin painting, you need not necessarily wait till you are a proficient with your pencil. Good drawing may be learntas well with the brush as in any other way; and in fact, the artist must learn to draw with his brush, that is, to produce the right effects of light and shade, true perspective, ete. Good lessons are, of course, of inestimable value, but many have done much for themselves by study and assiduons practice.
As for the outlit required, it need not necessarily be a very expensive one. If you can manage to have a room to yourself, however small, so much the better. Darken all the windows but the one at which you have your easel. A northern exposure is to be preferred, as the light is more even. If painting from nature, the lower part of the window should be darkened, in order to give the proper effects of light and shade. Your palette should be light and fit your hand comfortably. Nos. $2,4,6$, and 9 , flat red sable brushes, one flat bristle brush, and one badger blender No. 4, will be a good assortment to begin with, which can be added to as you wish. It is well, however, to have two or three No. 6
brushes, as that size is constantly needed. Get the best brushes, as it is very unsatisfactory to work with poor tools. For the same reason, get Windsor \& Newton's paints, which are more reliable than the American. A good selection of colors would be the following:-

* Silver White.

Yellow Ochre.
Light Cadmium.
Medium Cadmium.
Orange Cadmium.

* Light Rerl.
* Vermilion.

Madder Lake.
Rose Madder.

* Indian Red.

Cobalt.

Permanent Blue.

* Antrerp Blue.
* Terre Verte.

Zinnober Green (light;
Schonfeldt's).
Raw Umber.
Burnt Sienna.
Bone Brown.

* Ivory Black.

Blue Black.

This list can be shortened by taking only the colors marked with an asterisk, with the addition of burnt umber, raw sienna, and Naples yellow. For some reasons it is far better to restrict yourself to as few colors as possible, so as to learn their capabilities. The old masters had a much more limited range of colors than we now possess, yet who will dare to dispute their claims to preeminence as colorists? To your list of materials add a two ounce bottle of poppy oil, a tube of Soehnee frères' retouching varnish, some soft old calico or muslin, a tube of megilp, and, if necessary, transfer and tracing papers.
A sketch block for oil painting, containing 32 sheets, $7 \times 10$ inches in size, can be bought for $\$ 1.00 ; 10 \times 14$ for $\$ 2.00$. These are good to practice on. You can also purchase woodeu panels, or papier maché, wooden, or porcelain plaques for decorating. It is considered advisable, generally, to paint standiug, but as some will find it necessary to paint at a table, a small easel for the purpose will be desirable. It can be made by any carpenter from the following measurements: The top and
bottom pieces are respectively fifteen and seven inches wide, with a perpendicular brate, eighteen incles in height, connecting top and bottom. The side pieces conneeting the top and bottom shonli! hare holes in them at regular intervals for abont half their length; a comple of pegs fitted into these holes serve to support a loose bar of wood, on which the picture rests; by means of the holes the picture can be placed higher or lower on the easel as is desired. A legtwenty inches long and pointed at the end, is hinged to the back of the easel at the fop; and one twenty-two inches long, pierced with holes, is hinged to the bottom of the easel. By means of these holes, the inclination of the easel is govemed. Acarlemy board, or eanvas stretched on a frame, can be used to paint on, instead of the sketch block referred to above.

Sketch your desigu correctly, but lighty; if yon cannot draw, trace and transfer it as directed elsew here, but if yon paint much yon will soon be able to throw asite these aids. Now stmby your shlojeet and "set fomb palette" with the aeeded colors. It is well alla!s to put the colors on in the same general order, as you will then work more systematically. To "set the palette," squeeze ont of the trbes portions of color abont the size of a a leal, and lay them along the mper edge of the palette, beginning from the thmo side in the following orier:White, Naples yellow, ruv sienna, burnt simma, light red, Indian red, vermilion, terve verte, zimnober arien, umber, blue, and black. Iou have thus ample space for mixing, with the palette knife (which must be allled to the list given above), the various tints on the lower part of the paletfe. The lighter tints are usnally placed on the right haud side of the palette. White or black is usmally combined with all colors as they are reguired liglater or darker.

To make any tint, take on the point of the knife a small portion of megilp, and the colors fou want, mix
them on the palette, scrape them up, and lay them in gradations for use.

Of conrse in a single chapter we cannot enlarge on the laws of color. The amateur shoult, if possible, possess and study thoronghly some good book on the surbject.

The following lines by Henry Hopley White were originally published in connection with a diagram illustrating the relation of the colors. They may help some in the study of color, and are convenient for reference.

[^0]> While orange warm-advancing you behold, The mion of two primaries forms a lue As perfeet and deeided as 'tis new; But all the mixtures which all three befall, Tend to destroy and neutralize them all; Nay, Mix them-three parts yellow, five of red, And eight of blue-then color all has fled, When primaries are not pure, you'll surely see Their eomplementals change in due degree: If red (with yellow) to a searlet tend, Some blue its complemental green will blend; So if your red be crimson (blue with red), Yonr green with yellow would be varied; If yellow tends to orange, then you find Purple (its complement) to blue inelin'd; But if to blue it leans, then mark the change, Nearer to red you see the purple range. If blue partakes of red, the orange then To yellow tends: if yellowish, you ken The secondary orange glows with red, Reader, Farewell! my lesson now is said."

In the first painting, the aim should be to get in what is called the " dead coloring," which blocks out the design in the principal colors. This done, the background can be laid in. If a smooth background is wished, it can be obtained by the use of the blender, using it somerthat after the manner described for china painting. If a mottled background is wished, two paintings are required. First, cover the backgromed with a simple flat tone, say terre verte and burnt sienna. In the second painting, which must not be done until the first is perfectly dry, wipe the paiuting over with a little poppy oil, being careful to leave no superfluous oil on the painting. This causes the two coats of paint to combine. Now go over the painting with the same tints used in the dead coloring, correcting, improving, aud softening, making the high lights (that is the parts nearest approaching to white), laying them on with spirited touches, and with rather stiff color. For the mottled effect in the background use Antwerp blue, yellow ochre and white, with a very little light cadmium; prepare also some terre serte and burnt sienna, with madder lake. Paint in
these contrasting tones in alternate masses, large or small, as desired, and then blend them with a_large soft brush. This will give a mottled olive-blue effect. A spray of pink and white chrysauthemums would look well on this ground.
For the third or last painting, when perfectly dry, oil as before, and tonch up where it is needed, putting in the last delicate tonches which often serve to emphasize and bring out the picture.
The "glazing" is put on at this stage. This process is the laying some transparent color, mixed ouly with megilp, overany part to emrich and give it depth; thus burnt sienua put on over red has a very good effect. It must be put on sparingly, so as to see the former paintings through it, and even taken off entirely with a rag or the finger, in some places, as in the highest light.
In painting, endearor to lay on jour colors steadily and boldly, with as fer strokes of the brush as possible. Keep your tints pure and distinct, each in the place jou mean it to be. Do not, by going over and over them with the brush muddle and mix the tints, for some tints destroy each other, and the transparency and beanty of the painting will be lost. In softening or uniting the tints, it is best either to use an intermediate shade, or else, with a clean brush and no color, to melt them together. Much depends ou the first painting. It should be lighter in color thau the picture is intended to be, as all colurs sink, more or less, into the ground as they dry, and it can easily be glazed and toned down to the proper color. The shadows should be put on thin in color, the lights with a greater body of paint, with a sharp and firm touch. The brightest lights may be painted quite white, and glazed to the required hue; beantiful effects are produced by glazing, but it is dangerous for the student to be too free in the use of it.
"Scumbling" is the reverse of glazing, and is done loy
going over the painting, when quite dre, with opaque tints of a lighter hine, generally with a misture of white. Colors that are too bright can thus be cooled down, and objects made to appear more distaut; smoke mist, and the haziness of far-off hills, can be thas produced. The color should be laid on very thiuly, with a hog's bristle brush, and should not be laid over shadows.

When painting, often retire from your work and look at it from a distance, so as to julge of the effect. When copying from nature, as in painting flowers, look at them sometimes with your eyes half closerl, or through a tube formed of rolled up paper. This will isolate your sub. ject, and help yoir to see the lights and shadows more correctly.

Much of the comfort, ant snceess also, of an amateur depends on their keeping their painting materials in good working order. Brushes put away with paint in them will soon spoil, while if much paint is left on the palette considerable waste is involred. Yon can save your pure colors by taking them off the palette with four knife, placing them on a plate, and then corering them with water; they can be kept for sereral days in this condition. Now serape all the raste color and oil off sour palette; wipe it off with a rag aml pour a little linseed oil on it (I beliere kerosene oil is often used for this purpose); wash all the color ont of your brushes, wiping them with a rag, and then dip them in clean oil. Some prefer washing them in soap and water. Wipe the dirty oil off your palette and then rub it with a little clean oil. Put brushes and palette safely aray from the dust.

If possible, paint from nature; take simple oljects at first which will await yomr time, as flowers and landscapes will not. A bit of Trapery is excellent practice. If you are at fault in drawing get a good cops of a flower, and by it learn how to dras the real flower, but copy the
eolor from the natural object. I have found this method very helpful. Don't destroy first attempts; they may serve to keep up your comrage in times of apparent failwie; date these attempts, that you may note the prog. ress made.

Painting, now-a-days, is used for decorating almost everything. It is so much more effective, for the time spent on it, than embroidery that, in this go-ahead age, it is not strange it shomd be popmbar. On silk and satin, decorative painting can be quickly executed by one Who has a good eye for color, and command of the brush. The method is mach the same as above described, only that some means often hate fo be taken to prevent the oil from spreading. Some use a mixture for this which can be obtained at the stores where artists supplies are sold. Others paint orer the design with oxgall, and others again find that by taking ont their paints on blotting paper and using turpentine as a medimm, all danger of this kind is arerted. Satin, for painting, shonld be of a firm, even texture. The gloss on its smfalce is very trying to the eyes, and for this reasou many have had to give up using it. Plush and velvet are also used to paint on. The aim must be to produce effective rather than delicate work. The plush must be firmly fastened on the drawing-board, the pile rmning downwards. The paint should be taken out on blotting paper, aml atbont ten times as much will be needed as for ordinary painting. Use siecatif de Comrtray as a rebiele instead of megilp or turpentine. Sketch jour design in Chinese white, and then press the colors down with a stiff bristle, poonah, or pounce brush, until they failly take hold. Dog-wood, coreopsis, cactus and other large blossoms are most a railable for this kind of painting. Care should be taken that the shape of the plush left by the leaves or flowers laid on it is graceful.

## FLOWER PAINTING

## IN WATER COLORS.

There is, perhaps, no branch of decorative art more fascinating and less troublesome to acquire than that of painting flowers in water-colors. The outfit is so inexpensive as to be within the reach of all, while there is no reason that any one, with sufficient taste and patience to learn any kind of fancy work, should not attain a tolerably satisfactory legree of proficiency. Of course, every one knows that really artistic work can only be done by those who have mastered the rudiments of drawing and color, and who possess also some degree of talent. But many, who could never hope to call themselves artists, will nevertheless find, if they but try, that they ean do much toward beantifying their homes, and giving pleasure to their friends, by the use of the brush. Aud my experience has been, that rery many of my friends who now can paint with both skill and taste, succeeded in defiance of all the rules of the schools. They attempted to paint before they cond draw; when, in fact, they had to trace everything they wished to paint. Their first emo. tion after carefully coloring a traced drawing was surprise that they could do so mneh, but quickly followed the feeling of dissatisfaction with their work, accompanied, ${ }^{\text {"h }}$ however, with the conviction, that having once painted a flower thes could certainly improve on it. The beginning is the great tronble. To aroid difficulties,
therefore, I strongly advise all who are afraid to draw, to trace their copy on thin paper and transfer it, by means of transfer paper, to the card or paper on which they intend to paint. If corrections are needed a piece of bread, broken, not cut out of the loaf, is very much better than India rubber in rubbing pencil marks out. It is also useful in removing color, and is often used in order to pick ont the high lights.

Having decided to begin, the next question is, as to an outfit. Winsor and Newton's paints, either in tubes or pans, are decidedly the most desirable. A box containing twelve half pans, comprising the most needful colors, and a sufficient assortment of brushes, can be obtained for about $\$ 3.50$. Bnt the smaller boxes of French colors, costing from 50 cents upward, are quite satisfactory, and you can always add to your assortment of colors. Two brushes, either sable or camel's-hair, will be enongh for a beginner. These vary a little in price, but camel'shair brushes generally cost about five cents a piece. You can make your own holders. For making up your box you can, if you choose, omit some of the colors given, as their place can be supplied ly mixing other colors. I give a list of desirable colors from which to choose. Those in italics are not necessary to a beginner, although very useful.
*Blue black ..... $\$ 0.10$
$\dagger$ Burnt umber. ..... 10
Hooker's green, No. 1 ..... 10
" 6 No. 2 ..... 10
*Vermilion ..... 10
Brown madder ..... 20
$\dagger$ C'admium yellow ..... 40
$\dagger$ Raw sienna ..... 40
*Chrome yellow, 1, 2, 3, 4 ..... 10
$\dagger$ Cobalt ..... 25
Carmine ..... 40
Pink madder ..... 40
Crimson lake ..... 20
Gamboge ..... 10
Indigo ..... 10
Aureolin. ..... 40
*Olive green ..... 10
Prussian blue ..... 10
The colors marked with a (*) are opaque,and those with a $(\dagger)$ are semi-transparent.

Indigo can be made by a mixture of Prussian blue, black, and crimson lake.
This, again, combined with Indian yellow, makes a rich, dark green.
Olive green is made by mixing Prussian blue, gamboge, and vermilion.
Almost the same effect can be produced with a mixture of vermilion and gamboge, or Indian yellow, as with cadmium.
Prussian blue, with gamboge or cadmium, modified by burnt sienna, madder, or umber, gives a good number of greens. Hooker's greens, however, are extremely convenient, and zinnobar green (which comes in tubes), is especially useful when a warm light tint is needed.

Almost all flowers and leaves need gray in some step, of the painting, and this is generally obtained by a combination of different blues, reds, and yellows.
2Thus for a greenish gray, cobalt and chrome yellow, No. 2 or 3, would be used. For the shadows of white flowers, cobalt, Indian yellow, and Indian red, form a good tint. I have space ouly for a few hints on this subject. Careful study, observation, and experiment can alone teach you.

The next thing to be supplied is the surface on which to paint. Whatman's water-color paper is the very best
to be used, but cards, panels, and even a good quality of wrapping paper will do. For real study, however, a block of Whatman's paper, costing according to size from 25 cents to 82.95 , is decidedly the most desirable. The blocks are preferable to paper in sheets, as it obviates the need of stretching. This paper is very absorbent, so that you must have your color mixed so that it will flow freely. Have a piece of rag by you to wipe your brushes on after washing them.
The following directions for painting on velvet are compiled from the "Art Interchange":
"Cotton velvet or velveteen of a close pile or make is preferable to silk velvet. The colors used are the ordinary water colors, mixed with veluntine or gum dragon, sal volatile, or spirits of wine, so as to prevent their rumning into each other. The brushes are those known as scrubs; they are made of bristles and have flat, bushy ends, instead of pointed ones. As the velvet cannot be touched by the hand while working on it without spoiling the pile, a hand-rest, such as is described in the chapter on China Painting, is needed. It must be long enough to extend entirely across the velvet.
"Ponuce your design on the relvet according to the directions on page 63. Mix up in various small sancers the tints required, addling to each a little veluntine, or gum dragon, or either of the other mediums named. Make the colors perfectly smooth and as thick as weak eream, and do not attempt more than two shades of a color. Dip the brush into the darkest tint of a color, aud well till it, letting any superfluous color drain off on blotting paper. Hold the brush upright over the velvet and paint by dabbing it on the velvet; never dab the color quite to the edge of a leaf or petal, but take a clean dry brush, and soften it off gradually there. Put in all the darker parts first, and never work over them or near them till they are quite dry; then take another clean
scrub and finish with the lighter parts. Let one color dry perfectly before another is put on, and make the colors as solid as they will bear. Add a little water to a color when it is being softened down, but with very great care. Two shades on a leaf or petal can be softened into each other by brushing the leaf with the hard brush the way in which the pile runs most easily, and then the contrary way. Sketch in the stamens, reins and fine lines of the design with a crow-quill pen after the painting is dry. When all the work is done, take a smooth, soft hat brush and brush it gently over the work so as to raise any part of the pile that may have been flattened.
"Dark colored velvets must have the design painted over in Chinese white before coloring. To do this paint the design over with a slight wash of veluntine; let this dry thoroughly, and then put on Chinese white, mixed with veluntine, putting it on as dry as possible. Then paint with the right colors, mixed with veluntine, and shading as sparingly as possible. Do not brush when finished unless the pile is much flattened."

## K E'NSINGTON AND LUSTRA PAINTING.

Many people who desire to beatify their homes or to make handsome and acceptable presents, are unable to spare the time required by needle work. To such, Kensington painting offers a quick and easy means of decoration. The materials required are oil paints (in tubes), a porcelain palette, red sable brushes, Nos. 4 and 6 (it is well to have several of these), spirits of turpentine, and the inevitable rag. The same care must be taken as to background, coloring, etc., as in embroidery, and the same hints should be observed as to realistic treatment. The object is decoration and not picture making.

Squeeze the colors ont on the palette, mixing them to meet the requirements of your work. Do not thin them, but use as thick as possible. A little sugar of lead or megilp mixed with them will facilitate drying, and prevent the possible spreading of the oil. If the colors seem to contain too much oil, take them out on blotting: paper before placing them on the palette.

Have your design distinctly outlined, but keeping the lines as light as practicable. Lay on the colors smoothly, painting from the edge of the clesign in, so as to have the ontlines definite. Use the colors which you will need in the finished work, but the shading and blending of the tints need not be done as carefully as in ordinary painting. Let it dry for a few minutes, and then with a steel or lacquered pen scratch in the coloring so as to
simulate the stitches in "filled in" work. An ordinary pen will do, but pens with three, fire, and seven points each, can be bonght for ten cents a piece, and the work is done mach more quickly with them.

If you wish to use a light shade of a transparent color on a dark gromul, paint first with white, scratel it in, and then paint with the required color.

Satin, velvet, velveteen, are all goorl materials on which to work, and I think holtand limen might be used to good advantage. I have seen a lovely mantel searf painted in oils on such linen, the background being relieverl with dashes of gold. The design was dogwood, a phant that is extremely decorative in character, and that has been very much ased for this purpose.

Kensington painting is not considered artistic, but it is quite pretty, and many can avail themselves of it who have not time or patience for that Art to which, like Learning, there is no royat road.

## LUSTRA PAINTING.

It is quite important in loing this work to iorocure the best materials, as the metallice colors lose their tone and brilliancy if of inferior make. Bragdon's colors are recommended by the highest anthorities on the subject. A complete outfit consists of from three to six hog's-hair brushes of different sizes, a china palette, six bottles of metallic, and five of opaque powler colors, palette-knife, turpentine, and a bottle of medium.

The medinm must be used very freely, and must he thoronghly mixed with the colors. One can begin, however, with a much smaller assortment. One or two shades of bronze, two shatles of gold, and some of the bronze green can be used to begin with; the assortment being enlarged when needed.

One great advantage that Lustra has over ordinary painting lies in the fact that it can be washed, if care is
taken in the process. Linen, satin sheeting, velret, velveteen, and plush, all offer a good surface for these colors. Care should be taken to select velvet, velveteen or plush, that has a short nap, as the colors wet the pile and canse it to lie flat. The work is very much more beantiful on velvet and similar surfaces, but lately an invention has been patented by means of which a plushlike surface is given to a design on iny material, whether of wood, stone, paper, metal, or textile fabries. The effect is that of plush apliqué. The process is said to be a very simple one, aurl the material used-"plushette "is comparatively inexpensive.

In beginning work, select a simple design, choosing one in which the forms are large and distinct. A good crewel design of large flowers or leaves is an excellent one for a begimner. Transfer it as for embroidery, drawing in veins, and stalks, but no lines indieating shading. On velvet and similar material it is generally best to have the stamping done at a fancy work store. Fasten your material on a drawing board with thumb tacks. Take a little of the metallic color, either gold or silver, out on the palette, and rub it down with the knife till it is perfectly smooth; then add medium, mixing them thoronghly until you have a perfectly smooth liquid. This is to be used as a stopping, to prerent the opaque colors from sinking into the material. Rul) it well into every petal and leaf, using it freely, so that it will adhere as a flat wash. Use the brightest silver or gold metallic colors over all the parts of the leat they are used for; work in the various shades of metallic colors in this way, using both silrer and gold on the same flower, if contrast is desired, and working over every petal and leaf mutil a strong, smootlo surface of color is obtained, the lightest part heing either bright gold or silver, and the deepest shades with the darker metallic colors. On linen the metallic colors need not
be used for "stopping," the painting being done in opaque colors, often with only a few metallic touches. After the surface in metallic colors described abore has been obtained, take the opaque powder color, treating it in the same way as the metallic color, and the first painting being dry, deepen all the shadows with their proper colors, using a clean brush and rubbing them well in. Use rose red tints above the gold, the white, etc., above the silver, and white and black above the green metallies.

Do not attempt any fine gradations of shade, but trust to the effect of broad masses of color well combined, Omit stamens and other very fine lines. The two things to be chiefly attended to in lustra painting are, the rubbing the colors perfectly smooth, and working them up until not a trace of the material remains.

## PAINTING IN GOLD.

Very pretty decorative effects are produced by painting on crash, linen, etc., in gold, and afterwards outlining the design in silks. A bold conventional design must be used for this purpose. When the design has been clearly stamped on the material (eren such coarse stuff as saeking or burlaps can be used), paint it carefully with oil paint.

A good tint is made by mixing chrome yellow, raw sienna, and a very little Prussian blue. This will give a greenish tinge to the gold. When this coat is thoroughly dry, paint it orer with gold paint. Care should be taken to get a good article, as poor gold, silver, or bronze paints, tarnish rery quickly.

The painting done, outline the design with silk match. ing the paint or a shade darker. Twisted chain stitch would be very effective for this purpose. Both gold and silver paint might be used in the same design. Very charming door panels could be painted in this may.

The tacks used in fastening the work in place should be concealed by a narrow gilt beading, or a narrow strip of Lincrusta Walton could be used. Screens, friezes, stripes for portieres, would be very novel decorated in this way.


## STENCILLING.

This chapter might appropriately be headed "Decoration made easy," so simple and effective is the work. Given good taste as to color and form, or even Queen Elizabeth's power of choosing good advisers, and a little care and neatness are the only requisites for producing pleasing results.

A stencil is a pattern cut out of a thin sheet of some stiff material, applied smoothly to the surface to be decorated, the parts of said surface left uncorered by the ent-ont pattern being then painted over with the desired color.

These stencils can be cut ont from sheet brass, zinc, thin wood or cardboard. The metal is preferable for small patterns, as it is more durable, and less liable to absorb the paint. They can be cut ont with aftet saw, or a sharp knife. When made from cardboard it is a good plan to use two thin sheets, pasted together with strong paste. These cardboard sheets are especially usefnl for large patterns, as they are not so apt to warp or bend. When they are to be used for distemper they shonld be painted over with "Pattern Knotting." This can be procured at any paint store or made at home, by dissolving gum shellac in maphtha.

Patterns for steucils should be designed on paper, pasted on to the sheet from which the stencil is to be ent, and then cut out with a fret sam, or a sharp knife. The edges of the pattern should be clear cut. It may be
necessary sometimes to leave small bits of the pattern unent, so as to hold the design in place. When the paint has been applied, these bits will appear as blemishes, and must be carefully painted in by hand. This process of stencilling can be applied to many uses. Tiles and. plates can be very prettily decorated in mineral colors, and the stencilled patterns can be afterward touched up by hand. When a pattern is to be repeated a great many times, a stencil saves much labor, and insures a greater degree of uniformity.

Some economically inclined people transform Brussels carpet from which the pattern is worn off into very ser. viceable oilcloth by painting the wrong side. Generally, a plain coat of yellow ochre is considered sufficient, but a really pretty floor covering could be made by stencilling a border, consisting either of one of the key patterus, or of a continuons leaf or vine patterns. I have seen in antists studio a matting on the floor, painted grey with a border of Indian red. The centre was a square of grey surrounded by a border of red, of the same width as the outside border. This red was edged on either side by a line of black, aud the centre border was divided into small squares by black lines. Each of these squares had little figure pieces painted in back. The effect was extremely pretty, and by means of well chosen stencils could be easily achieved by one wholly ignorant of drawing.

Stencilling is particularly useful in the decoration of large surfaces. A pretty frieze can be easily executed by this means, and the whole wall itself may be enlivened by means of the steucil. We are apt to think of whitewashed walls with a certain degree of scorn, but distemper painting was after all lont a variety of whitewashing, and there are several considerations which plead with many in favor of the use of a lime or whiting wash for our walls. The first of these is its superior
cleanliness, and therefore wholesomeness. It is inexpensive also and not difficult to put on, and can therefore be renewed at will. Those who have suffered from an ugly or inappropriate wall 'paper which conld not be renewed without incurring an undesirable expense, can appreciate this adrantage. For those who wish to try decorated walls done with whitewash, I copy the following directions for a wash that will not rub off-:
"Take of good unslaked lime half a bushel, and slake with boiling water, covering it during the process to keep the steam in. Strain the liquid through a fine sieve or strainer, and add of salt, one peck, previonsly well dissolved in water, of rice, three pounds, boiled to a thin paste and stirred in boiling hot, one pound of elean, nice glue, which has previously been dissolved by soaking it well, and then boiled in the usnal manner. Now add five gallons of water to the mixture, stir it well, and let it stand a few days, carefully covered over from dust. This whitewash has a remarkably brilliant lustre, and, it is said, will last thirty years. Coloring matter, such as Spanish brown, umber, chrome, or ochres, singly or mixed, adds to its effect. Indigo or blue vitriol give a good blue color. If you find this too expensive or troublesome, a very good permanent washemay be made by simply infusing two ounces of glue to erery form pounds of lime or whiting. This will not rub off."

The ground should be smoothly laid on in the desired color, and allowed to become perfectly dry. Then fasten yom stencil flat on the wall, in the desired place. It must lie perfectly close to the wall as otherwise the color may rum underneath and thus destroy the outline. Paint over the stencil with the color prepared for the design, and, having earefully removed the stencil, wipe any superfloous color off it, and arrange it for the next division of the pattern. Leaves may be easily formed into graceful designs for borders for a wall. Good de-
signs may be copied from wall papers, carpet borders, or damask liuens.

Oil paints cau be used in the same way for decorative purposes. The brushes to be used for stencilling are of various sizes according to the work to be done; they should have a broad, flat surface, like the brushes used for putting in grounds in china painting. Stencilling can also be used on-linen canras for portieres, curtains, etc., with great success.

Where the pattern is to be repeated several times, the local or ground color can be stencilled, and the design afterward touched up carefully; this touching up giving the individuality to the work, which distinguishes hand from machine labor.

Very beautiful decorations may be applied to articles made of white wood by means of stencils. A very pretty table was for sale in the rooms of the Society of Decorative art. It was of white wood with ebonized legs. The top was square, the centre forming a chessboard, the squares alternately of black and white. On the white squares were silhouettes of children; and immediately around the chessboard was a band of white, on which was a procession of children. The outer border was a band of black. The figures on the table were presumably drawn by hand, but I have selected it as a good instance of what could be done without any knowledge of drawing. The figures could be easily selected from the many illustrations in children's books, by Miss Ledyard, Miss McDermott, Kate Greenaway and others.

The table-top should be perfectly smooth and clean before beginning work. With ruler and pencil mark off your chess board, and the line separating the two outer borders. Have ready in a saucer or plate some lampblack and turpentine mixed to the consistency of cream. Paint your outside border, and the alternate squares on the chess board with this mixture, taking care to keep,
the lines true. While this is drying prepare your stencils. If yon prefer, your border can be a vine or a purely conventional pattern, and the designs for the square may correspond. When the paint is quite dry you can stencil in your designs with the lamp-black. Let it get thoroughly dry, and then paint all over again, repeating the process until the painting is of a dense black. When the last coat is perfectly dry, rub thoroughly with pumice stone; wash off with clear water, varnish again. Let this dry, then rub with a soft flamel, repeating the process until a perfect polish is oltained.
Any other design could be substituted, as, for instance, leares, flowers, and butterflies scattered carelessly over the surface. The rarnish gives a beautiful yellow tinge to the wood.

In a box which I own, the process described above has been reversed, the background being black, and the pattern leit white. When this is done, the design must be carefully shaded with India ink, and although the effect is prettier, much more work and more knowledge of drawing is required than in the first process. If preferred, the design can be transferred to the wood and then painted in with black.

This work is very appropriate for ornamenting landkerchief, glove, or work boxes, and for panels in cabinet doors. The effect is very much that of inlaid work. Monograms and appropriate mottoes can be used with good effect.

A very good imitation of ground glass can be made as follows:-
Take a piece of stencil paper just fitting the pane of glass, and draw a suitable design, cutting out the parts which are to be opaque. This pattern may be the same for all the panes, or the centre panes can be merely decorated with trefoils or stars, while a border is carried reund the outer panes.

Take a piece of putty two inches in diameter, and put it in a piece of thin muslin, twisting up the latter so as to form a handle, and having one side smooth. Clean the glass well, fit in your stencil, and pat the surface over with the pad. Take the stencil carefully off, and when dry, varnish with transparent varnish.

To make this varnish, dissolve one part pearlash in about eight parts water, add one part shellac, and heat the whole to the boiling point. When the lac is dissolved, cool the solution, and saturate it with chlorine until the lac has all settled. When it is dissolved in aleohol, it forms a varnish which is as transparent as any copal varnish.

## WOOD CARVING.

Modelling, woull carving, working in papier maché, or in boiled leather, are all arts which are comparatively easy of attainment, (that is, so far as decorative work is concerued), to all who have attained a fair proficiency with the pencil. Not only so, but they themselves will aid the amateur in attaining that proficiency. Here, as in everything that is worth doing at all, one must be willing to begin at the lower round of the ladder. Diligent practice will soon give you the control of your tools; after that, your progress need only be limited by your talent.

The first essential is to provide yourself with good tools. Do not get fancy tools, such as are put up in sets for amateur's use, but make up your set as you find out your needs. The best tools are of English make, and should have ash handles. Short haudles, not more than three inches in length, are preferable for begiuuers, but experts can get a firmer grip of their tools with longer handles. Carpenter's gouges and chisels can be used, the principal difference between them and carver's tools being in the shape of the edge. In the latter, the tool is ground on both sides, giving a roof-shaped edge. Carpenter's tools having an edge on one side ouly, have to be frequently turned in the using.

A full set of carver's tools would be about thirty in number, but half a dozen will do for a beginner, aud it will probably be a jear before you will need more than
a dozen. It is always best to hare few tools in the begimning and to learn thoroughly the use of the few. The same rule applies in almost all-indeed, I may safely say in all-the minor arts. ©Some of the most delicate carrings in China have been execnted with most awkward and inconvenient tools.

One of the first necessities for wood carving is a common table, strength and weight being important qualities. To this yom work should be screwed or mailed (using French points for nailing) at first, but as you progress a hold-fast and earver's sorew will be necessary. When yom find these essential thes ("an be procured at a tool shop.

A tracing wheel, such as is used by saddlers, is a rery important tool, as are also a few punches or stamps for the background, but a little ingenuity will enable you to substitute other tools for them if they are not to be had. A few hollow gonges, a few tlat ones, and some chisels, are essential, as well as a V or parting tool. A mallet, a rasp, and a couple of tiles (a half ronud and a bastard), will make up the list of necessary tools. You can begin with only one chisel of each kind. As you proceed in carring, you will find it very desirable to learn a little of carpentry. The best way is to take a few pratical lessons from a carpenter. Tools should be kept very sharp. In every place some one cam be found from whom you cau learn just how to sharpen them. The edges having been ground will often need "setting." This should we done roughly with a Turkey oil stone, an Arkansas stone being used for the finishing up. Remember that the chisels should be gromad on both sides. For setting the inside edge of the gouges and parting tool, small pieces of oil stone, ground down to the size and shape of the tools, and fastened into pieces of mood are used. These are called "slips."

Before attempting a piece of real carving, become used
to your tools. Take some simple design, and having drawn it or transferred it on the wood, go over the edges with the tracing wheel, which has sharp points like the rowel of a spur. If you have no wheel, go over it with a sharp borkin, or a piece of sharp new knitting needle, set into a wooden handle, pricking out the outline by this means. Now take your parting tool and cut away a light groove, keeping just outside the dotted line already pricked out. Work slowly and lightly, as, if you attempt to hurry, the result will probably be that you will dig your tool in too deep, and tear mp the wood in a very ragged and ugly manner, or perhaps you may break the edge of your tool. Make your ents light and short at first. You can deepen this outline groove by going over it repeatedly with the same tool.

Instead of ruming the ontline groove with the parting tool, jou can "stab out" the same line with a tool exactly corresponding to the outline of the design. Hold it so that while close to the line the eut will slope a litthe outwards, and with a slight blow with a mallet or with a push of your hand cut into the wood. Repeat this process till the whole design is ontlined.
The next step is to cut away the grouml, leaving the design in relief. With a flat gonge or chisel ent this gradually away, begiming a little way from the outline and cutting towards it, and afterwards carefully cutting away the centre. Make it as smooth as you can, finishing it up, if desired, with a curved file. The edges of the design may be gently rounded off with a rasp and sand paper. Small polishers, to be used in getting into corners, ete., can be made by taking sticks of wood, shaping their ends to suit the diffieult spots, dipping them into glue and theni into sand. Blow all the sand ont of your work, and indent the background with the stiletto, or punches used for the purpose. The more thoronghly this is done, the better the design will look.

Oil thoroughly, wipe dry, and rub long and patiently with a pine stick.

A motto, formed of Gothic Ietters, or a Gothic border, forms a good design for first attempts. Foliage should be kept until later.

It is a good plan to practice running lines with gonges and chisels until you have the same mastery over it that you would have over a pencil.

In this way you will become able to carve with a free touch, giving the element of originality which adds so much to the value of the work. Practice thoronghly on simple forms, such as iry or oak leaves, before attempting more involved designs.

Beginners generally use black walnut, but oak, pear and apple woods are all beautiful. Lime or linden wood can be cut easily and then stained to any color. Any wood can be stained a dark walnat stain. Take a common umber, or Vandyke brown powder, mix it with beer or strong coffee; coat your wood well with it; rub it off when dry and repeat the process. If yon wish it darker add a little lamp black and spirits. Oak may be darkened by washing it with strong soda water. The dyes for wood sold in paint stores are also as a rule very satisfactory. A good ebonizing process is as follows: Wash the article first with a strong decoction of logwood. Give three or four coats of this wash, letting each one get thoroughly dry. Then wash it with vinegar in which steel or iron filings or scraps have been steeping for some days. When dry, put on thin shellac with a soft cloth, thus giving it the dull polish of ebony.

When you first attempt foliage, get if possible a carved copy, or a plaster cast. Modelling the leaf in clay, leather, or papier maché will aid materially in learning to carve it. The hollows of the leaf should be very carefully cut away, or rather, to use Mr. Lelaud's words, "slaved away."

Intaglio carving, in which the design is sunk into the ground instead of standing out in relief, is an easy va-



Fig. 25.

Fig 24.
riety of carving and is very useful in forming monlds for papier maché and leather work.

Carving in the round is an adrance on carving in re-
lief, which can be reached by the amateur if he takes heed to his ways and works up to it slowly.

Study good carving when possible. Real work will teach more than any amount of engraved designs. Figs. 24 and 25 are designs which may be used as borders or for frames, etc. The illustrations given in the chapter on Leather Work are also excellent patterus for carving.

## MODELLING IN CLAY.

Modelling in clay may be recommended to the amatemr, anxious to try his or her hand at art, on many accounts. The materials are cheap and easily procured. The work may be made not merely decorative but useful, and it teaches one much of drawing. Indeed, this fact is recognized now in many of the primary schools in teaching drawing. The children are first tanght to make the forms, such as cubes, spheres, ete., and then made to draw them. And the remembrance of mud-pies suggests another advantage in clay modelling orer the other minor arts-the taste is borm in us. Every child makes mud-pies; all children, too, relight in that other pastic material, dongh, and will keep quiet and amused for a long time if allowed to mould it according to fancy.

For beginning this fascinating work but little expenditure is required. Modelling clay ean be procured for from three to five cents a pound. In some localities it can be had for the digging, but for a beginner there is an advantage in getting it at a pottery, becanse it is then ready for manipulation. It shond be kept in a waterproof box, as it is necessary to keep it damp as long as you are using it. If, however, the clay hecomes dry and hard, it can easily be moistened and kneaded up like dough to the proper consistency. Sometimes the clay will have air bubbles in it. This is remedied by what is called wedging-that is, cutting the lump in two with a wire and then striking the two piles hard together, and
repeating the process unlil the whole mass is perfectiy smooth.
The tools for modelling ean be procured at any artists' supplies store, or if once seen can be easily whittled out in pine wood.
Many fancy that foliage is one of the easiest things with which to begin, but the author of "Minor Arts" (an authority on all such subjects), recommends beginning with an animal. Procure a plaster cast of the object you are about to model, say a rabhit. Form a lump of clay (working on a smooth board or a slab of slate or marble) into a general rude resemblance to the object. It is well to make a smooth base of clay on which the figure may stand. Have the elay from which youmodel your figure a very little wetter than the base as the drier clay will absorb the moisture from the lump, and in the process the figure will be more firmly fixed to the base.
This rule should be always remembered in building up your figures. It is much easier for the beginner, however, to take from than add to the clay. Therefore in your first attempt, be sure and have the blocked out form sufficiently large. Ascertain that you have the main points correctly by means of a large pair of compasses. Don't be discouraged by repeated failures. "Rubbing ont" is much easier than in drawing, for it is but to work the whole into a lump and begin again. If yon find that, the clay is getting too dry, sprinkle water over it by means of an atomizer or a brush dipped in water.
When the figure is blocked out satisfactorils, proceed by means of tools and fingers to bring out the details. Use alternately the point of your bone tool to form the eyes and imdentations of the ears. For the larger curves the finger's are the best tools. A fer days of earnest, studions work will enable yon to imitate any simple object. In finishing the hair the bone tool may be used,
scraping deeply to form the masses, and using the mere point for the fine lines.

Copy foliage from leaves carved in wood, or from plaster easts. If you live near a pottery you can procure a vase, in what is called a green or mbaked state, and ormament it with some leafy design, or if you choose you may make for yourself a vase, and having ornamented it with a design in relief, yon can have it baked at a pottery. Probably your first vase will be like poor Robinson Crusoe's earliest attempts at pottery-one-sidedor your clay may get too dry; but patience and perseverance will enable you to overcome the first difficuly, aud yon can moisten your clay for another attempt. Keen your unfinished work in a jar or covered box, and if there seems to be danger of its drying too quickly cover it with a wet cloth. A pair of compasses is needful in getting circles exact, and, in fact, will often be useful in determining curves. Never send a piece of work to be baked (which can be done at a pottery) until satisfied that it is thoroughly dry, as any moisture must inevitably result in breaking tho model. You can, if you prefer, further ornament your vase by painting before baking it in underglaze colors. I have giveu suggestions for the first steps in this art only. Handling the clay will show you what you can undertake. Remember that in this as in all real work, the foundation must be well laid. Copy what you endeavor to do carefully. Do not attempt to refine too much. Clay is solid, and leaves, flowers, and tendrils made of it should not look as if a touch would destroy them. It may sometimes be necessary to place props under certain parts of your work, to support them until the clay hardens. This is especially the case if you attempt modelling figures. In modelling, have your whole design, whether in the round or in relief, accurately blocked out, so as to mark the proportions before at. tempting to finish any of the details.

## CASTING IN PLASTER.

Modelling and taking casts are kindred employments, as by means of the latter process a panel or statuette can be repeated indefinitely with comparatively little expenditure of time or labor. The process is purely mechanical, and can be mastered by any one who is willing to devote the necessary time and patience to it. Casts are made either in plaster of Paris or gelatine. The process is twofold, the first step being to make a mould from which the cast is afterwards taken.

To do this fill a pan or basin half-full of water, and pour gradually into this enough plaster to absorb the water. Then stir with a spoon for a minute or two until you hare it about the consistency of thin cream. In this state it is called "slip." This "slip" when poured over a surface to the depth of an inch or two will adapt itself to every inequality of smface while in a liquid state, but will rapidly harden. If, after hardening, it is removed, it will present a reversed copy of the surface over which it has been pomred.

Plaster of Paris plaques, for instance, can be readily made bỳ pouring "slip" into a plate or plaque which has been thoroughly oiled. Liquid gum arabic and dissolved alum added to the "slip" will render it extremely hard and durable. A plaque thus made can be painted.

In order to take a cast of a bas-relief in clay build a wall of clay around the object to be cast, making it two
or three inches high, or, if preferred, a cardboard box exactly fitting it may be used. Oil your model, which must be thoronghly dry, with boiled linseed oil, using a brush to put it on with. Wipe off any superflnons oil, and pour in the "slip" to the required thickuess, shakins or gently striking the mould to make sure that the plaster settles into every revice. In about ten minutes the east, though still damp, will be firm. Remove the clay wall or the cardboard box, and cut away the edges until you can see the line of separation between the plaster and the clay. Separate them carefully, aiding the process with a dull kitehen knife. It will take about twenty-foul hours for the plaster to become thoroughly hard.

The next cast must be taken in the same way, except that the plaster cast just taken is to be used as a mould. The resulting east, if carefully managerl, will be a facsimile of the elay mould. When the "slip" is mixed with gum arabic and alum solntion, as directed above, such a cast is durable enongh to be used as a panel in a bracket or tublinet.

Fine casts of wood carving or solid leather work can be taken in this way, and if dyed with lamp lolate, umber, and beer, will be very good imitations of oak.

The slip cain be tinted with any desired color loy mixing any dissolnble color in the water used for making the slip. In bas-reliefs a fine elfect may be ohtained by pouring white slip into the sumken portions of the plaster mould, and then filling the mould with slip tinted to a delicate shate of bue. When taken from the mould the design should appear white on a blue ground.

Casts can also be made to imitate ivory by either using milk and water for the slip, or by oiling the completed cast with oil in which a little beeswax has been dissolved. When dry rub with cotton wool, and keep in a smoky room, for a while.

Gelatine moulding is done in the same way as moulding in"plaster, the gelatine being dissolved in cold water. If to the water is added a very small proportion of tannic acid (Mr. Leland says a "few hundredths"), the cast will be almost impervious to water. Gelatine is a much cleaner material to handle than plaster, and rather easier to manage. The best is the French, and can be obtained at stores that supply materials for carvers and gilders.

The directions given above are for flat objects, but when a cast from the "romml" is to be taken the process becomes more tedions and complicated. An egg is one of the simplest "round" objects to cast, and the process of monlding one of these will il! vstrate the process to be followell generally.

Have a pan or dish of sand, and place the egg in it so that one half will be abore the sand. Pour the slip carefully over this until it is covered to the requisite thickness. ILaving the monld of one half of the egg, replace the egg in it, oil the edges of the monld, having ding out little holes at intervals to receive corresponding projections on the other half of the monld. Cover the other half of the egge with slip. When this second half is dry oil the inside of both halves, fasten them together by means of the looles and projections spoken of, and through a small hole prepared for the purpose pour in slip, shaking the mould gently until the plaster has hardened.

Some objects have to be cast in monlds of three or more pieces. Sometimes these are separated by means of fine strings passed carefully around the mould, the ends coming through. Sometimes a dull knife is used for this purpose, and sometimes the different parts of the monld are obtained by successive casts, as was done in getting the tivo parts of the egg.

Fruits can be very successfully imitated by using wax for making the casts from plaster monlds made as de-
scribed above. To save expense, however, most fruits are cast hollow, which is effected as follows:-

Soak the two pieces of the mould in hot water. The wax should in the meantime be very slowly melted in a tin saucepan with a spout to it, care being taken not to let it come to a boil, or it will be discolored. A lump the size of the object to be imitated, should, as a rule, make two casts.

As soon as the wax is melted thoronghly, place the sancepan on the stove, and taking the parts of the monld from the hot water, remove the moisture from their surfaces by pressing them gently with a handkerchief or soft cloth. Use a very light hand, merely pressing but not wiping the mould. Perform this drying process quickly, or the monld will be too cool, congealing the wax too rapidly, and cansing it to settle into ridges; on the other haul, the wax must not be too hot, or it will adhere to the mould, and will not come out entire.

Having laid the two halves of the mould so that there can be no mistake in fitting the one to its exact place on the other quickly, pour from the sancepan into one of the half moulds nearly as much wax as will fill the hollow mate by the model, quickly fit the other half on top of it, squeeze the two pieces tighly together in the liand, and still holding them thus, turn them over in every possible direction, so that the wax which is slowly congealing in the internal hollow of the mould may be of equal thekness in all parts. Having continued this process at least two minntes, the hands (stll holding and turning the monld) may be immersed in cold water to accelcrate the cooling process. The perfect congealment of the wax may be known after a little experience by the absence of the somnd of fluid in shaking the mould.

As soon as the mould is completely cooled, the halves may be separated carefully, the upper being lifted straight up from the under, and if the operation has been
properly managed, a waxen fac-simile of the model (so far as shape is concerned), will be turned out of the mould.
This, however, will require trimming, so as to remove the ridge which marks the juncture of the two halves of the mould, and any scratches or inequalities make by the knife in removing the mould should be polished out with a piece of soft rag, wet with spirits of turpentine or wine.
The wax may be tinted by stirring into it while still on the store a little of the required color. The tube colors used by artists are preferable. When required of a very delicate tint, as for the green gooseberry, the color may be thinned by the addition of a little Canada balsam and spirits of wine. The shading and varied coloring must be added after the fruit is cast.
Some of the smaller fruits, such as the raspberry, mulberry, etc., are cast solid. In this case a hole must be made through the mould at a point corresponding to that at which the stalk is to be inserted. Afterwards the stalks are added before the wax is poured in.
The stalks of fruit are usually made, like those for wax flowers, of wire covered with silk, except in fruits having a very large stem, like the cucumber, when a roll of green silk or cotton, stiffened by a wire through the centre, should be laid on the groore of the mould. It is well to allow the cotton or silk to project into the body of the fruit at least half an inch, so that when the easting is complete, the stalk will be firm in its place and will bear the weight of the fruit.
Wax flowers are made from sheet wax which can be bought prepared and tinted for the purpose. For the benefit of those who may wish to try preparing the sheets themselves, I give the following directions, said to be reliable:-

To every pound of wax we have added about an ounce
of Canada balsam, or spirits of turpentine, or of a solation of resin in spirits of turpentine. I think the last named is best for colored wax, but the first or second for a white wax. If the wax is frequently melted, it will require a little turpentine added to it. A composition of this kind having been melted in a glue pot, or in any other vessel which will not allow the contents to be overheated, shonld be poured into oblong tin moulds about two inches deep, two inches and a half wide, and four inches long. These can be made by any tinman; the edges should be turned downat the top and strengthened with wire as with common bread tins. This tin should not be filled quite full, and the wax should be allowed to cool slowly, or it will wrinkle and require re-melting. Slow melting and slow cooling are essential points. When completely cold, the wax will separate from the tin by its own contraction, and may be slaken out by tapping on the bottom of the mould. Yon have now a block of wax which it is required to make into thin sheets, and this is accomplislied in the following manner: Obtain a carpenter's spoke-shave, which is flat, and the blade of which is at least an inch broader than your block of wax. In order to prevent the block of wax from slipping while the shaving is going on, the following plan has proved successful. Have a hard piece of wood cut in the shape of a capital $T$. The cress piece should be the width of the block of wax, and the leg should be abont three inches long. This leg must be inserted in a square hole in the table on which you intend shaving. A plug can be made to fit into it when the hole wonld be inconvenient. When sharing the block of wax, the top of the cross piece of the $T$ should be kept as near the upper enge of the wax as will allow the spoke shave to pass easily over it. The shave must be well warmed at the fire or by dipping it into hot water. If you have two shares you can warm one, while
nsing the other. The cutting stroke should be made steadily but quickly. The thickness of the sheet must depend on the adaptation of the shave, which must be learned at the time of purchase. The first three or four sheets will not cut equally, but the wax will remelt; the most perfect sheets only should be laid aside for use. For preserving them in nice condition, lay them between sheets of paper which have been brushed orer with boiled linseed oil, and which have been allowed to dry. The wax may be tinted as directed above by using the following colors in different proportions: chrome yellow, Prussian blue, French ultramarine, carmine, and flake or Chinese white.

Wax flowers are or should be modelled after real ones rather than after patterms cut in tin or cardboard, and to enable one to do it well several of the flowers to be copied should be kept at hand. Pick one carefully to pieces, and cut petals, calyx, ete., carefully out, curling: and monlding them over a long pin. Put them together as far as possible in imitation of the way in which they grow. The stems are made as directed for fruit, over fine wire. Very fine wire may sometimes be used as the foundation for stamens and pistils. Begin with very simple flowers, and comy Nature as far as possible. Antumn leares are one of the easiest things to imitate, and are good practice for coloring. As said before, where practicable, tinted wax is used to give the local color, but this must be shaded and variegated after the petals, etc., are cut out. Water colors in powder are used for this pupose, and are applied in the following manner :

Having taken a very minute quantity of color powder on the blade of a penknife, lay it upon a palette, or the under side of a plate, and press it with the blade to destroy any lumps. With the penknife also add a very small quantity of weak gum-water, and work the mass to the cousistency of cream. The colors must be applied
with pointed tinting brushes. Each color requires a separate brush, as powder color will not mix like fluid ones. The brush must be held upright at right augles to the wax, and the color applied in the direction of the graining. The color must be applied at once.

The flower end of the apple and many other fruits can be imitated by pushing a clove into the eye of the fruit. Highly glossy fruit may be varnished with mastic. The down upon peaches, etc., may be imitated best with the flock used by paper-stainers. The fruit having been varnished or wet with spirits of turpentine, should be rolled in the flock or bran, the latter blown on it. The bloom upon plums and grapes is imitated by dusting them with common powder blue.

When wax-flower making has to be done choose a warm situation for your work. If the hands are too hot and the wax is thereby rendered too flaccid, wash in tepid water. The lands are oftener too coll ; in which case washing in hot water and a seat near the fire are recommended. Never be in a hurry, or yon will spoil your flower. Be careful in cutting the petals, etc., correctly. After having dissected and imitated a flower preserve patterns and sketches of its different parts, so that when the season for the plant has passed other copies of it may be made. Always hold the flower in the left hand, and apply fresh pieces with the right. Coarse silk dipped in wax may be used for fine stamens. The tips dipped in flom and theu coated with wax will imitate anthers very well.

## MODELLING IN GUTTA-PERCHA.

Gutta-percha modelling is generally used to imitate Barbotine pottery. It is very easy to do, and the mate. rials are comparatively inexpensive. Where possible buy the gutta-percha in sheets about one-fourth of an inch in thickness.

Boiling water must always be at hand. Modelling tools are useful but not necessary; as large pins, such as those made for Macramé work, will generally answer for any moulding. Oil paints, brushes, and a bottle of amber enamel are also needed, and a pair of pliers for holding the petals, leaves, etc., and fastening them together will be found useful. If you cannot get gutta-percha in sheets dip a piece in boiling water for a few seconds and roll it out with a heary round ruler, taking care to wet both ruler and drawing board with a sponge to prevent sticking. Cut out the petals and leares roughly with a pair of scissors-the exact number with which it is intended to form a group; put these again into boiling water, and then roll out to the desired thickness. Avoid getting them too thin, or, when painted, instead of their having the appearance of china, they will be more like tin. Recrit them to the shape and thickness required, and with a small ivory or hone paperknife (also wetted) draw in the markings lightly and gently, so as not to cut the material (if the gutta-percha is too harl, put it again and again into loiling water); mould aud bevel the petals and leaves upon the fingers, as in leather work,
then set them aside to harden (this ocenpies a few minutes); roll out the stalks, getting them nicely romeded, and then put all together in readiness for transfer to pot or vase, arranging them as you would a natural group of flowers.

To make the petals adhere, hold them for a moment to the flame of a candle or match. When slightly softened at the base, lay them down on a small piece of gutta-percha, about the size of a shilling, and overlapping, or not, as in nature. Press them together with the pliers or with the paper knife, heating the tool by dipping it into the hot water for a few mimes. Some find it easier to mould the stems over fine wire, such as is used for tissue paper flowers, but a skilful worker will dispense with this. It must be remembered that the flowers should all appear as if modelled on the vase or other object to be decorated. A good liquid glue or cement can be used to make the decoratious adhere more firmly.
Be careful to put in stamens boldly, but aroid too fine details, as that tends to cut up the rork, and is unnecessary; press them back well into the centre, and do not omit the pistil. Study simplicity in the arrangement of groups, and carefully copy the matural growth of the flowers. Beginners generally err here, if they hare not sufficiently observed and studied nature. The rases or pots may be in terra-cotta, earthenware salt jars, or the little brown jars usually used for culinary purposesthese last are most inexpensive, and answer admirably. When the group is quite hard and dre, hold the flowers to the lighted candle separately, and quickly apply them to the rase, taking care that there is no moisture between them, for this will surely prevent their adhering. Leave the work to stand uutil it has become firmly fixed to the vase, and then begin the painting.

First lay on a thin coat of flake white (oils) mixed with
pale amber enamel, using a log-hair brmsh. Cover it so as to loose the color of the gutta-percha, and paint ax smoothly as possible in one direction, from base to edge of petals. While that is drying begin the background, holding the vase upon the hand, and, having fully charged the brush with color (sar black), mixed with enamel, begin from the top; about midway use a little yellow (middle chrome), and blend it in with white towarts the bottom. Wipe the brush after every color and keep the colors separate upon the palette, as in real china painting. Mixing them gives a dull effect. Pay particular attention to keeping them pure. The brush must be fully charged with color, so as to blend the tints, and to prevent hard lines; birt the paint must not run down, or it will dry in ridges and canse mpleasant breaks on the surface. Continual practice will alone morent this.

For second and third painting of flowers a short sable hrush is necessary. Blend on the colors smoothly and separately, mixing enamel with all of them. For instance, if poppies are chosen, use remilion, dark chrome, thake white, and a small tonch of erimson lake. These colors are opaque (with one exception), and therefore require careful treatment; it they do not vary sufficiently, the flowers lose their freshness and get tin-like in apparanse. No shatow color is required. By introducing a certain proportion of white, sufficient light ank shade is obtained, and the enamel adds to its transparency and brightness.

We will here mention that single flowers are preferable for this work-smitowers, poppies, wild roses, conrolvuli, garden anemones, int single dahlias are most successful. Double flowers ire difficult to manipulate, and are not artistic. In paintingstems and leaves, apply the color as before described, aroiding too vivid greens; use plenty of white with these, and keep them in har-
mony with the flowers. Always let the latter be prominent, they being the most interesting feature in the composition. A little burnt siema on a faded leaf improves it; mix with a little white to soften the edges. Knots of ribbons can be easily introduced on plaques, and look well in linding together, and finishing off a group. Butterflies also are useful for filling up open spaces. Dog-roses are delicate, and very easy. Use vermilion and white, a little chrome, and a tiny streak of crimson lake occasionally. In sunflowers, middle chrome, flake white, and burnt sienna form the principal colors.

The work is most inexpensive, for, as mentioned before, two or three ounces of the material will form a group, and the above-named colors are all that are necessary. Common pots or jars are recommended, and plaques in terra-cotta are especially successful; the backgrounds on them are carried out in the same way as on the jars, begimniug with white, and shading the colors towards the bottom; be mindful that this is done after the group is attached to the plaque, and the first wash of color has been laid on.

As in all painting, some knowledge of drawing is necessary, and those who lave studied nature carefully, camot fail to succeed. The object we have in view is to make our work resemble china as much as possible, at the same time to give the groupings all the fresh look of nature. This is obtained by careful modelling, and also by laying on the color in thin washes, allowing every wash to become perfectly dry before attempting finish. Many unhappy bits of work are produced by neglect of this rule, and begimers often fail at the outset by hurrying on, their only olject being to obtain an effect; this is fatal to progress or success.
Particular attention to the above simple rules will produce work almost equal to the original barbotine china, and if perserered in syill ensure success. Neat fingers
and a certain amount of practical knowledge are needed, and we would advise everyone in taking it up to stndy and coly directly from nature, thereby producing good work, which will not be merely imitative, but artistic.

Fig. 26 shows a receptacle for flowers in the share of a log made of pottery and ormamented with pansies modelled in gutta percha. The separate parts of the flowers


Fig. 26.
and a leaf are shown in Fig. 27. Cut out for each pansy two back petals (at the upper right hand corner in Fig. 27), two side ones (the middle one in the cut), and one like that in the lower right hand comer.

Make the edges irregular and somewhat crinkled as in nature. Take great pains to curve and model each petal correctly. Press the lower petal with a large pin or the bone paper knife on the right side at the base, so as to hollow it slightly. In modelling the petals, it will often be found better to heat the tool you use, than the petal itself, as there will not be so much danger of pulling it out of shape. Some prefer to tint the separate parts of the flower before making up. If you do so, you
must be careful to leave all parts that are to be joined together unpainted, as they would not allhere otherwise. Model the pistil carefully from a marom strip of gutta percha, copying the cint. Press the base of the lower petal under the pistil, so that the point of the latter rests on the hollow base of the petal, pinching them carefully together with pliers heated in the boiling water. When this is firm, press on the side petals, and finally the back ones. Morlel the two parts of the calyx (seen in the upper left hand corner of Fig. 27) making


Fig. 27.
three of the larger pieces and two of the others. Press the three larger at the back of the flower, turning the lower part of each back, and corving each towards the point resting against the two back petals of the pansy; then beneath the front petals fix the two smaller portions of the calyx. Examine a real pansy, pulling it to pieces to get at the separate parts, if yon find difficulty in following these directions. Make the leaves of different sizes, moulding and veining them carefully. The log can be painted to suit your taste or can be merely paixuted a smooth, even white, when it will resemble china.

## CHINA PAINTING.

In china painting, as in every other art, success can be reached only by diligent, intelligent practice. No amount of mere verbal directions can ever enable you to attain the desirable medium in your work, between too thick and too thin, too dry and too wet. The manual dexterity, and the artistic judgment, without which success is impossible, are to be secured by diligent painstaking practice, and by that alone. But if you have an average amount of taste, a steady hand, and a determination to merit success by perseverance, there is no reason why you should not, in a time which will seem surprisingly short after it has passed, produce work quite good enongh to be used for home decoration, or to secure a purchaser if you desire to sell it.

The expense of an outfit is a very variable quantity; but, assuming that you wish to avoid all unnecessary expense, I give below a list of the tools necessary for the simpler styles of work, with the prices at which they can generally be obtained in New York.
Two good camel's hair brushes. Nos. 4

Two small stipplers or blenders, at 15 c ..... 30
A fine brush for tracing ..... 10
A horn palette knife ..... 15
A piece of India ink ..... 15
One brush about $\frac{1}{2}$ inch wide ..... 10

In addition to the above, you will need a mall quantity of spirits of turpentine; about ten cents' worth of oil of lavender, which can be bought at any drug store; a common plate, to be used as a palette; a few soft rags; a little cotton; a few sheets of tracing paper; a sheet or two of transfer paper; and a hand rest, consisting of a strip of wood, a foot or eighteen inches long, by two inches wide, with bits of wood of the same wilth and about an inch in length, firmly nailed to each end.

Having provided the tools for your china painting, the next requisite is an assortment of colors. For amateurs' use, the most convenient are the Lacroix tube colors, which can be obtained from any dealer in artists' materials. The following list embraces all that is necessary for a beginner's use :
Dark blue, eosting per tube, about ..... \$0. 20
Deep ultra marine blue ..... 30
Light sky blue ..... 25
Blue green ..... 25
Yellow ochre ..... 20
Ivory Yellows ..... 20
Yellow for mixing ..... 18
Apple green ..... 20
Deep chrome green ..... 20
Brown sepia ..... 20
Yellow brown ..... 20
Brown No. 3 ..... 20
Deep red brown ..... 20
Capucine red ..... 20
Violet of iron ..... 20
Neutral gray ..... 20
Flux .....  20
Carmine No. 3 ..... 25
Ivory black ..... 20
Light carmine No. 1 ..... 20

The colors printed in italics, thongh desirable, are not absolutely necessary, and may be dispensed with it economy requires.

A set of colors, specially prepared for grounds, is also necessary. These must on no account be mixed with the other colors. A good selection is:
Celadon (a peculiar greenish tint), costing per tube, about $\$ 0.20$
Copper Water Green ..... 20
Maize ..... 18
Turquoise blue ..... 30
Chinese yellow ..... 18

The colors in china painting cannot be mixed with the same freedom as in water-colors, for they are sometimes very much chinged in the firing. Some yellows, for instance, will cause colors mixed with them to disappear. The rules for their use are principally based on the proportion of iron employed in their manufacture, and the colors have been divided into three classes-those containing no iron, those with but little iron, and those into whose composition iron enters largely.

The first class is amposed of white, the blues, the carmines, the purples, and the violets, excepting the violet of iron, which is really a red. In this class the blues can be used with mixing yellow, the purples, and carmines. A little blue can also be used with green, when, as is often the case, a bluish green is needed. Many shades of violet and purple can be made by the use of blue and carmine. Next come the colors with but little iron, the yellows and the greens. These do not mix well with the iron colors, the yellows especially being apt to cause red to disappear. Ivory yellow, however, mixes well with the flesh red, and is very useful for flesh tints. While yellow, as a rule, should not be mixed with the reds, the most brilliant red we can get on china is
obtained by painting with mixing yellow or orange yellow, and after firing, painting the yellow over with capucine red. Another brilliant red is obtained by mixing capucine red with carmiue, No. 2 preferably, but No. 3 or dark carmine will answer.

The iron cohors are reds, flesh reds, red browns, iron violets, browns, brown jellows, ochres, blacin, and most of the grays. I would alrise those who can afford it to test their colors on bits of china, making two of each color, and sending one to be fired. You can then compare the fired color with the unfired, and be more sure of the result.

Having now the materials with which to work, the next thing is how to use them. A tile or plate is the best thing on which to begin, as a flat surface is the easiest thing to manage. It is by no means necessary to buy fine china. Common eartheu ware plates are just as good to learn on, and much less expensive.

Have on the table, in aldition to your brushes, paints, ete., two sancers or small cups with turpentine in each. Pour a few drops of the turpentine on to your plate, and with a rag rub it perfectly clean. You can now draw the desigu with a tolerably hard lead pencil, or you can transfer it by means of tracing and transfer paper, as directed for transferring embroidery designs (p. ). To guard against auy slipping of the traced design, fasten it where necessary to the plate with mucilage or bits of wax, but leaving the edges sufficiently free to admit of slipping the transfer paper moderneath. It is best to make your first attempt in monochrome, that is, in a single color, shaded with itself. A spray of woolbine or Virginia creeper is an excellent design to begin with. Having transferred the design, you can remder your pattern quite safe by going over it with a fine tracer in lndia ink or a litile water-color carmine. This is not necessary, but it may save you trouble if you should make mistakes in:
your painting. If you do use the India ink or carmine, wipe your plate off with a little torpentine, and the red maks will disippear, leaving the ontline in water color. Now take jour tube of deep red brown, and having unscrewed the top, take hold of the rery bottom of the tube and squeeze very little out on your palette. Pour a few drops of turpentine or oil of lavender (I generally prefer the latter) on the paint, and rub it smooth with the palette knife. Take the largest of your two camel's hair brushes, dip it in the turpentine, so as to moisten it thoronghly. Then, having wiped the extra moisture out on your rag, dip it in the paint. It is well to have an extra piece of china on hand to try your brush on. If the paint works smoothly, leaving a clear mark, it is mixed just right. If it leaves a drop or blot at the end, there is too much turpentine in it. Wait a few minutes for it to dry. If it sticks and refuses to run, add a few more drops of turpentine or oil.

Having your color properly mixed, paint the leaves with a smooth firm stroke, painting from the middle of the leaf toward the edges, and making the brush follow the gencral contomr of the leaves. Thus in the woodbine the brush marks should all diverge from the point where the stem joins the leaf. In a violet leaf, on the contrary, the brush should be carried round in a sweeping curve from the stalk to the point of the leaf.

The stems of the woodbine can be painted in dark brown, or in asphalt, a very useful color to be procured at Ulrich's Artists' Materials Store in New York. If the design includes berries, paint the little stems joining them to the main stalk with capucine red. The berries should be put in with ivory black just tinged with dark blue. Preserve the circular form of the berry, and leave a ting half moon shaped spot of white china for the high light. If at first you cannot lave this spot, it can be scraped out with a pen knife or coarse needle. When
this first painting is thoroughly dry you can put in the shading with the same colors. The shading can often be very much improved by wiping the color out of your bush with a dry rag, and while your painting is still moist, toning it down with the cleaned brush. This will remedy the abrupt transition from dark to light but must be carefully done, for if any turpentine be left in the brush, the work will be ruined. It is quite customary to outline the designs on china in some darker color, the outline serving to throw up the design and also to emphasize its lecorative character.

In Fig. 28, is given a design, intended for a tile, but


Fig. 28.
answering for a flat vase, a pitcher or ans similar olject. The local tints should first be put in, using chrome green and a rery lithe mixing yellow for the crocus leaves,
and the same green with a larger proportion of mixing yellow for the snow drop leares. Be careful not to leave a blotch where the leaves are crossed loy flowers or other leaves. If your painting does not look satisfactory, do not attempt to remedy it, except by wiping it out and doing the work over again. Wrork that has been tonched up or doctored while wet is never satisfactory, and it must always be borne in mind that the furnace or kiln is a wonderful revealer of defects, when unfortunately it is too late to remedy them. So do not be afraid to wipe out your work over and over again while it is in your power to do so.

For the crocuses, mix some carmine and blue to form the purple tint, using the blue sparingly as it is an intense color, and becomes stronger in the firing. Paint the crocuses as delicately as possible. The color should be as thin as will work well. Begin at the top of the petals and make your strokes follow the general direction of the ontline and the shading. Leave the lower part of the tube of the crocus mpanted. For the hepaticas use a very thin wash of the same color as the crocuses and leaving the places for the calyx unpainted. The white of the china gives the local color for the snow clrops, but for the parts which are shaded in the design, mix pearl gray with a very little of the light green used for the leaves, and paint the shaded parts with delicate tonches, making your stroke follow the direction of the cops. The upper part of the hepatica leaf, and the stems and calices are painted in deep chrome green, modified with gray, No. 1. For the lower part use deep red brown, modified with gray, No. 1.

When this first painting is dry you can begin the shading. Shade the crocus leaves with deep chrome green, modified with a very little black, being careful to leave a light line down the centre. Shade the snow drop leares with pearl gray, light green, and a little touch of
carmine. Be careful to make the stems of the snow drop distinct. To do this, it may be necessary to give them a third painting. The deep color of the crocus can be worked down to the light color of the tube with a dry brush as described above.

Sliade leaf, etc., of the hepraticas with the respective colors in which they are painted. Shade lower part of the butterfly's wings with just a touch of black, blending it into the yellow as described above. It will be well to practice the veinings on the wings and the fine markings round the edges on a separate piece of china. A tracer is the best brush to use for these, and it is wise to always try the point after filling the brush with paint. Make the pistil of the hepatica of light green, shading it round the edge with gray. The stamens are mere dots of mixing yellow. Aroid a regular appearance in putting them on. Scratch away places for the stamens of the crocus and put them in with a mixture of orange yellow and capucine red.

If you have carefully followed the directions thus far given you will have learned more of the difficulties in your way and how to overcome them, than a long list of general rules and directions. The immortal Squeer's principle of teaching-" He goes and does it "-applies most forcibly in china painting. Never be afraid to wipe ont your work.

A few hints on the use of colors may prove useful. Shade capucine red with red brown or a little black, yellow with brown green, pink flowers with a mixture of carmine and apple green. Blue mar be shaded with black or black gray. Some blue flowers, such as the periwinkle or myrtle, may require the addition of a little carmine. Dark purple flowers can be painted with deep purple and deep blue, adding more or less of the blne as the color desired is more purple or crimson. They shonld be shaded with the same color. When a different color
is used for he shading, a little of the local tint should be added.

It is very difficult to obtain a really brilliant red, and consequently red flowers should be surrounded as much as possible with green. Sometimes a rery good effect is obtained by painting the flomers which are to be red first with yellow, and after firing, painting with capucine red. A touch of carmine gives the pink tinge often found in the stalk of a rose. Carmine and capucine red make a pretty under tint for red flowers when the under side of the petal is exposed. A rery light touch of black is often useful iu slading both green and blue. Violet of iron or red brown is very effective at the edges of rose leares. Practice and a little study of good painted china, where practicable, will soon teach other combinations.

A rery important part of china painting is learning to lay on a flat tint or ground. Like many another thing it is quite easy when you have done it, but oftentimes it takes many attempts before a beginner gets a smooth tint. One might travesty Shakespeare in giving directions for this process to an amateur and say "if jou have patience, prepare to use it now," and speaking from experience, I would add, "if you have no patience, don't try to lay a gromid."

Some of the grounding colors are much easier to lay on than others. Pinks, and blues, for instance, are very difficult to lay on smoothly, while chinese yellow and maize are easy to manage.

When your design has been painted and fired, mix the color you intend for the grounding. Using with oil of lavender-you can use turpentine, but the lavender is much easier to work with, as it does not dry so quickly -adding one third as much flux (this is not absolutely necessary) as you have paint. Mix your color a little thinner than for painting. Have ready a small ball of
a pieee of elean rag, or bit of chamois leather, so as to present a smooth surface about the size of a silver dollar or a little larger. The part where it is tied will form a convenient handle. Use the wide brush mentioned in the list of materials, and paint over the surface to be grounded, keeping your strokes as even as possible, and working quickly. The grounding tint will necessarily cover the design also. As a genemal thing, by the time the paint is all on, the part done first is sufficiently dry to blend properly. Nothing but experience will teach you just how dry it should be. Holding your dabber in the right hand, begin where yon began to paint, and dabble the surface with it, striking it perpendicularly with quick but very gentle strokes. Go in this manner over the entire surface, repeating the process until the tint is perfectly even. If the paint is a little thicker in some places than in others, you will find that a little practice will enable you, by au intelligent use of the dabber, to spread an even tint over the whole suluace. When you have done, there should be an even coat of color, without the slightest sign of a brush-mark. If, when the paint is dry, the tint is not even, wipe it all off' and try again. Don't be discouraged at repeated failures. Never try to remedy a defect. The only way is to take the whole coat of paint off. Never work where it is dusty. If hairs fall from the brush take them carefully off with the point of a needle, as otherwise they will leave a mark when the firing is done.

When you are satisfied with the ground, put your tile away where it can dry withont danger of becoming dusty. When thoroughly dry, clear the design of paint with a knife, or if your hand is steady, with a brush dipped in turpentine, and wiped almost dry. Keep the brush clear of color with turpentine. This latter mole, though more expeditions, is rather dangerous, as a drop of turpentine falling on your ground would entirely spoil it. Then
paint orer the design as in the first place. The colors lose a little in each firing, so that they need to be strengthened before sending a second time to the furnace. This way of laying a ground is the best for a begimer, but if you are sure of your hand, it is a little more satisfactory and expeditious to reverse the order of proceedings, that is, after outlining sour design, put on your gromid first, then clear the sketch from paint, when the latter is thoroughly dry, paint your design, and have all fired at once.

A tile is the best thing to begin grounding on, but yon will soon have no difficulty in tinting other articles. When grounding the rim of a plate, draw the brush from the inner edge to the circumference. A eup should be held by the handle, the strokes rumuing from the bottom to the top. The paint that rums over the edge can be carefully wiped away with a rag, or in the case of a plate rim, it had better be scraped away when dry with a knife. It is necessary to be very careful in this latter process, as the inner edge should be very regular and clear cut. In tinting any article presenting a curved surface, a brush, called a deer's foot from its shape, is very useful for dabbling the curved portions A very pretty style of decoration is to ground the article to be decorated in two colors. In this case, the design having been painted, one color is put on over a portion of the plate, leaving a very clear straight margin. This is fired and then the other color is put on. I have seen a very pretty cup, saucer, and plate decorated in this way with a stem of pussy willows and quince blossoms, on a blue and maize grourd. Another style of grounding is what is often called a Bennett background. It is much easier to put on, but requires good taste in the arrangement of colors. To put on such a background, you lay on a variety of colors, in irregular patches and then blend them all. Yon may, for instance, ground a vase in succession tints from
a warm dark brown at the bottom to the palest blue, or you may lave a mottled ground of but one color by varying the intensity of the tints. Turquoise blue or green are either of them beutiful used in this way. Peculiar and oftentimes beautiful effects can be produced by simply pouring liquid over a tile or plate, and letting it dry.

In decorating cups, pitchers, vases, etc., having handles, it is often desirable to have the latter much darker in color than the body of the object decorate. This is effected by putting on repeated coats of color, letting each successive coat become thoroughly dry. No flattening is needed, as a general rule for such small pieces of work.

In Fig. 29, I hare used one of Kate Greenaway's sket-


Fig 29.
ches to enable me to point out some of the initial steps in landseape painting. It affords, also, an illustration of
the ease with which decorative desigus may be adapted to the use of the amateur.

It can be used for a tile or small plaque or plate. And just here perhaps is a good time to say that it is not necessary always to buy new china to begin painting on. Cups and sancers and plates that have been in use for years may be successfully decorated so long as they are not flawed in any was, and a first attempt at this design may as well be painter on a tea plate as on anything else. When finished it makes a pretty ornament when hung up. Transfer or sketch your design as previously directed. Have the horizon line a little above the middle of the plate. Have ready on your palette, some sky blue, mixed as for grounding, and also some gray, formed by mixing apple green and carmine, using rather more carmine than green. Paint the sky over as if for grounding, using the sky blue for the upper part, and the gray for the lower, taking care to put on the blue more thinly as you approach the gray. If you wish clonds, wipe them ont rery quickly with a cloth, and then dabble the whole exactly as you would a gromed tint. You can paint shadows to your clouds with a gray made of ivory black and sky blue, adding, if you wish, a little ivory yellow for the lighter parts. When done, the blue should seem to melt into the gray, giving to the lower parts of the sky a receding appearance. This is called the distance. You may, since the landscape is so conventional, omit the clouds if you choose. Now carefully clean the plate (after it is thoroughly dry) below the horizon line of all color except the lines of the design, and paint in your horizon line with ivory black. Use a fine pointed brush and make the lines as fine as possible, as much of the beanty of sour plate dependis on this being delicately done. While you are waiting for the sky to dry you can be painting the foregromid. The grassy hill must first be washed over with sellow
the grassy hill must first be washed over with yellow brown. Observe, in painting, the general direction of the shadows, so as to have them all lying the same way. It is not at all necessary to have a niform tint in doing this part of the work, a very little care will make the darker tints appear where the shadows lie. It is as well to dabble over the ground tint, as it makes it a little easier to put in the greens afterward.

If your sky is thoronghly dry by this time, paint the water with a tint formed by mixing apple green and sky blue. Put on the tint with horizontal strokes, giving the appearance of slightly undulating waves, and keeping the tint slighty deeper as it approaches the shore. It is well to have two shades of the paint mixed. By mixing the green and blue in nearly even quantities, a gray tint is produced, while the addition of a little green as the water reaches the shore is a decided improvement. But there must be no abrapt transition. Do not dabble the water. Sketch your tree and the fence in with dark brown. Paint the foliage with grass green, modified occasionally with a little mixing yellow. Paint the children's dresses and the outside of the umbrellas with dark blue, stippling if necessars, to give a smooth tint. The caps, aprons, and sleeres are left white, but shonld be outlined with black. The sticks, ribs, and outlines of the umbrellas should be painted in black. The inside of the umbrellas in a mixture of blne and green. The faces and hands are painted in ivory yellow and flesh red No. 1, put on very thinly, and then the features put in with a very fine brush in baek--the hair may be yellow or brown. Yon may have some tronble to get the faces to suit ron, but patient trying will bring success in drawing eyes that don't squint and months of a decent size, whieh, after all, is about all that can be attained, as the size of the drawing does not allow for much expression. Shade the tronk of the tree with dark brown,
or preferably with asphalt, putting the color on with short strokes to imitate the ronghness of the bark. Ontline the fence and posts in the same way. Color the boats with either brown, green, or dark brown, ontlined with black, as are the salils, which last are left entirely free from paint.

The little village at the right hand can next he painted. When the walls are visible paint them yellow brown, windows black or asplalt. The roofs can be of capucine red, with one or two of brown green, all of them being ontlined with black. Now paint the grass on with different shades of green, using grass green as the predominant tint, modifying it with mixing yellow, or using brown green where it may seem needed. Paint the grass with short, quick strokes. A little practice on another piece of china, grounded like your plaque with yellow brown will soon give you the requisite tonch. The birds are painted in ivory black directly on the color of the sky. When you have the plate fired, have a narrow gilt rim put around it.

While mans who attempt china decoration, chiefly confine themselves to flower painting, the simplest and in many respects, most appropriate style of decoration, yet there are those who aim higher, and wish to excel in landseape or in figure painting.

A fer general hints as to means employed may be useful to those who wish to try a more complicated picture. Ivory yellow and caruation red in combination with the tints giren above, may be used for sunset or sumrise skies.

When a purplish tint is wished for the distance, use deep rich blue green and rarmine. Apple green modified with black green or brown green, can be used for the nearer parts. The color for slies shonld be laid on delicately. Use short broad touches in painting foliage. Study always the character of the tree and adapt your
stroke to the kind of foliage to be delineated. There is great room for study of color in foliage and specifie directions are of course impossible. Generally grass green may be used for the dominant color, monlified with mixed yellow for the high lights and with brown green for the shadows, and if these are dark, adding a little deep blue. Reflections of trees in water can be painted with black green mixed with grass green. Any light browns may be used for the earth, modifying them as necessary with black. Very pretty landscapes may be done in monochrome. Brown or black are the best for these. They have the appearance of sepia or India-ink drawings, and afford the opportmity for very gool study in light or slade, and also give room for real atistic work. Some of Landseer's heads of amimals atford excellent study for these monochrome plaques. One alvantage black and white has over color is that color often draws one's attention away from the drawiug. Having to depend entirely on the execution of your picture for effect, yon obtain a far greater power over your bush in using black only than you are likely to obtain if yon can cover up defeets effectively by combinations of color.

No one should attempt painting heads unless they can draw aceurately. Bad drawing is never so perceptible as in figures. Having your design very aceurately slictehed, the first step in painting a head is to put in the back gronud with a mixture of one third ivory black and two thirds sky blue. Have the tint dark near the heand, gradually diminishing it in intensity mutil it is lost in the white of the china. The local tint of the face is made of one thirld flesh red No. Il. and two thirds ivory yellow. This tint can be blended with a small dabber. Then put in the hari; if dark, use dark brown and shade with black mixed with the brown; if light, use sellow brown or sepia, modified with black. If very light, nse yellow irory for the first wash, and shade with sepia and
black. Nerer blend the hair, but try to mal:e your strokes give direction to the masses. When shading use a fine brush, giving as much as possible the texture of the hair. The rest of the work can be more safely done if you have your work fired at this stage. Then deepen your ground by cross-hatching it with the tint already laid on, making the !ines rather broad and slightly curred. Put in the features with a shadow tint formed by mixing one third irory black, one third sky blue, and one third flesh red No. II. Vary this tint with more or less red, when ron wish to lighten the shadow, or in parts where the color is particulariy moldy. Deep red brown is used for deepening the color on cheeks and lips. It must be very carefully used, as it loses il little in firing. A little violet of iron, or a little black mixell with the red brown can be used for shading the lips aml nostrils. The eyebrows are painted with a tint corresponding to that used for the hair. Use sky blue or brown shaded with black according to the color. The white of the china can be left for the reflected light on the eye or it can be touched with permanent white. In painting white drapery, leave the china for the local color and shade with sky blue and black. These are ver general directions. Each artist must make his own combinations, but these may give a key which will opsn the way for a beginner.

In giving these directions, 1 hare several times alluded to "firing"; the process by which the colors become fixed. After china has been fired, mistakes, as a rule, cannot be remedied, although sometimes they may be painted over. People living near large cities can generally have their "firing" done at a wholesalle china store or at a decorator's. The advertisements of many such firms are to be found in papers devoted to art work, and dealers in artists' materials can generally get the work lone, or procure the address of some firm who will fire amateurs work. The charges for firing are, as a rule, moderate,
from five to ten cents for each small piece, such as a cup, a sancer, a tile, etc., and increasing in accorlance to the size and shape of the article to be baked. Gilding is generally done by the decorators, as their facilities for such work are much greater than an amateur can have. The charges for this, too, with some firms are very moderate. I have had a cup and sancer fired and vers nicely gilded (a narrow rim round cup and sancer, with a vers prettily decorated haudle) for twenty cents.

Always mark your name or initials or some " trademark" on the back with black paint, and keep each piece carefully away from dust and smoke, enemies to be guarded against in all processes of the work. In packing china to be carried to the decorator's, the chief thing to be guarded against is rubbing. It is very disheartening to have your china brought back to you with parts of the painting eutirely removed. By having your painting perfectly dry, and packing it in soft paper, you will avoid this risk.
Small kilns for the use of amateurs are to be obtained at prices ranging from $\$ 3.00$ to $\$ 25.00$. The statement has been made that any woman who can bake bread properly can manage these kilns, but it is not every one who can bake perfectly, and mistakes in firing china would be far more lasting and provoking than in baking bread. Still, some who have tried them, have had great snccess with them, and the possession of one would be a great aid in learning combinations of color, as experiments could be tried on bits of broken china.
Sometimes when the firing is done the coloring in part or whole will seem weak or faded. This can be remedied by painting the design over again, especially strengthening any weak places, and having the whole fired over. Many always have their china fired at least twice, while some authorities, amongst whom is Miss MeLaughlin, say that ordinarily one firing is sufficient. Of course, if the
china is to be fired but once, the painting must be more carefnlly finished in every part than if a second painting is to be done. Gilding shonld be deferred to the last firing.

Mineral colors come in two forms, - the Laeroix colors, which are ready mixed for use, -and in powder shape. Amateurs generall! prefur the former as they are much more consenient to use, while professional decorators more generally employ the powdered colors. The batter are said to retain their brilliancy longer, are cheaper, and furnish some very desirahle tints not procurable in the tube eolors. When used with turpentine, they must first be thoroughly ground. To do this, put a little of the color on the malette, then add just enough fat oil (oil of torpentine) to allow of frecly mixing the color. This mast be thoromghy mixed with either palette knife or glass muller, the latter being preferabe, and then mixed with turpentine as with the tube eolors. Care shonld be taken not to use too math fat oil.

The smell of turpentine or oil of lavender is extremely mupleasant to some people, in some cases rendering it almost impossible for them to practice this branch of art work. To obviate this difficulty some use glycerine as a medinm, and as this mode of mixing the colors has certain adrantages it may be well to give directions for it.

Grind up the colors with equal parts of fuely powder. d gmo and glycerine, making the color when mixed about the consistency of butter (in ordinary temperate weather) and $n s i n g$ glycerine to paint with in the place of turpentiue.

Painting done with glycerine does not dry as rapidly as when fmpentine is used, and it is well to place the painting in an oven between the painting and the retouching, as two wet colors will spoil each other. To beginners this slowness in rlying is sometimes an arl.
vantage. The colors once mixed with glycerine, can be kept ready for painting for several weeks, if carefully kept from the dust under a bowl or glass jar, and thus some expeuse and trouble are saved. Perhaps it is as well to add that with the tube paints, colors left on the palette can be used again by the addition of fresh turpentine. Glycerine paintiug should have a coat of lavendar oil all over it before firing. This should be put on, after the painting is thoronghly dry, with a broal flat brush in even strokes, proceeding regularly from one side to the other.
Monograms should be very carefully and accurately drawn, and can be painted either in colors or tgold. A prepared liquid gold comes for this purpose ready for use. It can also be procmred in powder, to be used like other colors with turpentine. It shonld be laid on rather thickly. Where colors are used in connection with gold, the two should never be laid over each other, as they do not fire well.

## MOIST WATER COLORS FOR CHINA PAINTING.

Some find that the smell of turpentine or lavender oil, used in china painting, has an injurions effect on their health. Especially is this the case with those whose throats are delicate. The moist water colors, prepared from china painting, will prove a boon to all such. The mechanical part of this work, however, is a little more difficult than in using mineral colors mixed with oils. The moist water colors for china painting come in pans like Winson and Newton's water colors. As they do not rub off easily, howerer, a little must be taken off with the palette knife, and rubber down with a little water.

With the orlinary mineml paints, it is generally better to use the paint in thin washes, thus securing delicacy of tint, but with the water colors the opposite course is necessary. As much paint should be used with each stmoke as the brush will hold. Over-painting is to be
avoidel. The painting has to be frequently dried on the stove, to prevent removal of the underlying color, where any strokes have to be repeated. There is more need of knowing how colors "fire" with these colors even, than with the orlinary mineral paints, as they look very differently before and after firing.

A preparation of megilp comes with the English colors. Its use is to thicken the paint and make it more manageable. With the Dresden colors, a preparation called "under glaze " and resembling flux, is furnished. This is to be mixed with a drop of fat oil, and one of turpentine, and rubbed perfectly smooth on the palette. A thin coating of this is then laid over the design and thoroughly dried on the stove. The object is to give a surface to which the paint will adhere easily. The design can be readily seen through this coating if put on in ordinary water-colors.

## UNDER GLAZE.

In all that has been said hitherto, reference has been made to painting china proper, that is, pottery that has been baked and glazed. The biscuit case, or mbaked pottery, can also be decorated, and these decorations made permanent by subsequent baking. This work requires much more skill as mistakes cannot be so easily rendered as in over glaze painting. The ware is so porous before baking that the color sinks into it as into almostimmediately. To obviate this, a thin coating of gum tragacanth and water, or size is employed. Having the design well-traced, the first washes can be put on in water colors, mixed with gum and water. Then paint over with the mineral color, mixed as for over glaze painting, with eitherturpentiue or glycerine. Colors come especially prepared for under glaze decoration. More oil can be used on under glaze painting than in over-glaze, because the absorbent nature of biscuit prevents the danger of
blisterng or crazing. The colors altainable for underglaze painting are much more limited in unuber than for china painting. The reds are very poor, and pinks, purples, and some light colors, must be left for over glaze.

The colors change mach more in the process of firing in under-glaze than in china painting After having once been fired, additional touches may be given with the over-glaze colors, and in the hauds of an expert very fine results are produced. Under-glaze is a favorite mode of decoration with those who are good colorists, as well as skillful handlers of the brush.

Some times biscuit is recorated with oil paints, being subjected to a slight firing which fixes the colors, but this decoration is, of course not so durable as when done with mineral colors.

I have seen a couple of little brown stone jars or bottles which had been, when bought, filled with French mustart, very prettily decorated with sprays of flowers, on a mottled background, painted in oil and then fired. They had very much the effect of under-glaze painting.

Special colors are sold for the different varieties of pottery or vitreous painting, as for over-glaze, underglaze, glass, terra cotta, etc., but the general principles for using them are the same in all cases.

## LEATHER WORK

AND

## PAPIER MACHE.

The heading of this chapter will, to most readers, I fancy, bring to mind the leather work so fashionable some years ago, which consisted in cutting out leaves, flowers, etc., from sheet leather, and, after veining and moulding them into graceful and natural positions, glueing them on to a foundation. This work was sometimes left the natural color of the leather, but more often was stained almost black. Some of the work done was very beantiful, but it soon went out of faror, and little of it is now seen. The art of making it is very simple, hardly requiring directions. The leaves (which were the most desirable objects to be copied) are cut out, and while damp, veined with a bodkin or a tooling wheel (a tracing wheet without the sharp points), bent into shape and mounted on stems. These stems, as in wax flowers, are made of fine wire, covered, however, with thin leather instead of silk. Tendrils are made of narrow strips of leather, well dampened in salt or alum water, and rolled about a round stick to dry. The leaves are stretched over any suitable curved surface, such as the bowl of a spoon, a ball, etc., to give the desired shape. Sometimes moulding with the fingers is all that 125
is necessary. Much of the success of this kind of work must depend on the skill and ingenuity of the worker.

But there is another much more satisfactory kind of work to be done in leather. It is an ancient art revived. Like repoussée work it owes this recognition to Mr. Leland, so far at least as amatemrs are concerned.

In the Art Union for 1847, a long and interesting: account is given of what is called a patent process of working in relievo leather practised by Messrs. F. Leake \& Co., of London, and several of the illustrations here given are copies of work done by that firm. To quote from the article in question:
"It will scarcely be believed that leather thus prepared is a material sufficiently tractable to assume all the sharpness and nicety of tonch which distinguish these works; but in the flowers, fruits, and animals-figures which are executed in profusion, there is discoverable, with the liberal and mellow breadth to which we have alluded, a sharpness and fineness of ontline all sufficient for the closest imitation of nature; and it might be sup. posed, from the tenacious quality of the material, that the assumption of delicate form might only be temporary -that the necessary tension might yield to time, to damp, or to some of the numerons fortuities to which furniture and interior oruament are exposed, but, there is no reason to apprehend changes of this kind, since it is found to maintain incorruptibly every form confided to it, and with age, to acquire a superior quality of durability.

Fig. 30 is the cover for a book, designed by Oweu Jones, and to any one who has learned to carve in intaglio will not prove difficult of execution. Of course, another title could be substituted for the "Gray's Elegy," or the center might be filled with an "all over" design, the whole work being used as a panel, or, the border alone being used, a remarkably beantiful frame would be.
the result; all the illustrations can be used also for mood carving or brass work.


Fig. 30.
The material necessary for undertaking this work is not
necessarily expensive. For coarse work you can use scraps of leather which can be obtained at a low price from a book bindery; scrape or rasp these to powder, and mix thoroughly with paper and dextrine paste or patent knotting. Roll perfectly smooth with a woorlen ruler. Draw or transfer a design to it, and depress the background as in repoussée work. Or you may have the design either cut in intaglio in wood, or in the shape of a plaster mould well harlenel with gum arabic and alum. Press your soft leather into this, hammering it gently into every part of the monld.
The leather is softened by being soaked in a pot or pan of alnu water, made in the proportion of a table spoonful of alum to a pint of water. Salt may be substituted for the alum. Soak the leather from ten minntes to ten loours, as you find desirable. Experience will teach you when it is in the right condition. The water may be either hot or cold; in this, also, " judgment" being the only guide."

Another easy way of ornamenting it is to cut a pattern with the fret saw from sheet-iron, brass, or zinc, and press it into the soft leather. It can be dyed a good black, and when thoronghly dry will be extremely hard and almost unbreakable.
For finer work, sheets of basil or skiver are used, either alone or in connection with papier maché or leather scraps.

A plate or a small wooden bowl may be used as a foundation. Lay on it a piece of soft, damp paper to prevent the subsequent work from sticking to the plate. Then cut from fifteen to twenty pieces exactly fitting the plate, from soft newspaper, and with dextrine or even with good flour paste, paste them together, keeping them as smooth as possible.

Have ready some sand tied up in a piece of stout cloth, and use it as a mallet to make the layers lie
perfectly even. Strike gently over the surface until the paper plate is perfectly smooth and even. Instead of the paper you can use leather scraps, soaking them from teu to fifteen minutes in hot alım water, and then fitting them together so as to form il smooth surface, using the sand bag to secure an equal thickness throughout. As you become used to haudling this pasted paper or leather, you will find you can mould it like wax in your hands, and, with practice can model from it any desired object. When you have attained some degree of skill in handling it, you can model your ornamentation as you wonld in clay. Few tools are needed for this work. A few gouges, both flat and balf round, a pen-knife, pair of seissors, compasses, and a couple of pattern or tracing wheels, one with and one withont sharp points are all that need be bought. A wooden knife with a point is needed for varions purposes, such as scraping, working the lenther into corners, ete. Wooden gonges and chisels can be whittled ont as you find need for them. One or two grounding tools like those used invrepoussée work will be found useful.

Having your papier maché or leather "core" ready you can ornament it by means of designs cut out of thick card-board, or out of a sheet of papier maché of the proper thickness. Thus you can arrange a wreath of ivy leaves, or cat Gothic letters to form it motto round the edge.

Rosette desigus can be formed by using wooden button moulds, or you can make rosettes of papier maché or card-board, and arrange them round the edge of the -plate or bowl, glueing or pasting them into position. Then take a piece of thin skiver which has lain in hot water for two or three minutes and lay it on the core. It should be an inch or two larger in diameter than the plate. With fingers and tools stretch it carefally over the inside of the cnre, working it into every
corner and depression. To do this successfully, you must begin at the centre and work outwarls in all sides When finished, the leather should look as if the ornaments had been originally moulded from it. Draw the leather over the edges and paste it down on the wrong side. Cover the under side with a piece of skiver, glueing it neatly on. The ground between the ornaments can be indented with a cross hatched punch if clesired. Should your leather become dry, moisten it with a sponge.
To make a round box, the core should be made round a wooden cylinder, the ornamentation being either modelled by hand, or else cut out and glued on as described for the plate above. The bottom of the box can either be moulded on the cylinder, thus making the box in one piece, or can be cut out and glued on afterwards. Slip the core off the cylinder and cover with damp skiver as directed. Form the cover in the same way. A piece of thick card-board projecting above the box should be fitted into it to hold the cover on.
Tankards can be made in the same way over cylindrical cones of wood. Handles can be fitted on if desired, made of leather waste and rolled. If the glue used in making the core have bi-chromate of potash mixed with it, the papier maché will be water-proof. If instead of a papier maché core solid boiled leather be used, the tankards will be serviceable for holding liquids.

Quivers, shot flasks, and horns are all suitable subjects for leather work, and varied designs can be found in many books of antiquities. Bonbounières of all sorts can be mannfactured from papier mache and then painted, varnished or inlaid. China figures can be bought at the toy stores on which these can be moulded. When necessary, the papier maché can be cut apart, and afterwards sewn or glued together. A little study of some of the bonbonnieres now furnished will enable any
one to carry out this idea. When leather work is backed with a mixture of glue and naptha, it becomes as hard as horn, and almost unbreakable. If the design is worked in very high relief the back should be filled up with sawdust and glue, cement, or with plaster of Paris mixed with gum arabic.

Very good effects are produced by heating the brass stamps already alluded to, and pressing them into the leather. Gilding may also be applied to leather with very good effect. To stain it black, use good ink or ebony stain.

## PAPIER MACHÉ.

Some idea of the capabilities of papier maché can be formed from the following extract from a late paper. The speaker is a "property man" at one of the New York theatres.
"Urns, vases, bronzes, carved mantlepieces, helmets, shields, and similar "props" are all made from old paper. Yea, even a Grecian urn, ou which Keats might write an ode, can be built out of paper, which may once lave enclosed the unpoetic but soul-searching ham; I can give you a description of the method of making an urn, and that will serve as an earnest of all the rest." The process of making a plaster mould for an urn having been described, the property man goes on to say:-
"Now we are ready for the paper. It must be heavy and free from glazing. Ruthlessly tear this paper into small pieces, and soak it well in cleau water. While the paper is in the water, you proceed to grease the monld well with sweet oil or lard. If this is not properly done it results in dire disaster at a later stage of the work. Now lay on a coat of wet paper. Be careful to fill up all the works and crannies of the mould. Put on four more coats of paper. Then put on a layer of muslin and
glue. Now put on three more coats of paper. Now it must be left to dry for twelve hours. When it is so clry you couldn't squeeze a tear ont with a hydranlic ram, draw ont the inner coats of paper, leaving the muslin and three outside coats. I ought to have told you that only one-half of the min is made in this way at a time. When both halves are really, trim down the edges carefully and sew them together with stont twine. Cover the seam with a thin coat of paper, and then you are ready for the painting. First give it a coat of whitening, Then sandpaper it well. Now you may apply the final color. Yon can get up a handsome blue and gold vase by the use of blue paint and gold leaf. Brouze is imitated very closely by a coat of bronze powder, which you can get at any paint store."

Impressions can be taken of inscriptions, old brasses, ete., by first oiling them, and then pressing wet paper thoronglily into every indentation. Such impressions are called "squeezes," and are used to obtain fac similes of nscriptions. By diligent use of the sand bag, papier maché can be rendered very hard. The extreme ligh.t. ness of objects made from it is a great adrantage.

Members of amateurs' theatrical clulos might find it alvantageous to practice this art somewhat, as it might sometimes aid them in making needful properties.

Helmets, shields, sworls, etc., could be fashioned with comparatively little difficulty.

Papier maché is extensively manufactured in Birmingham, England. At one time it was largely employed in the interior decoration of houses in place of stucco.

Many fine buildings are this adorned.
In Birmingham, articles made of this material are coated with successive layers of asphalt varnish, which being dried by oven heat, leaves a surface capable of receiving a high polish. Mother of pearl is much used in their decoration, for which purpose, when several
layers of the varnish still remain to be applied, thin flakes of the shell are placed on the varnish in the required design, and are covered by the succeeding. layers, giving rise to slight elevatious when they are hidden by the coats of varuish The surface is then ground down smooth with sand paper and polished, aud the grinding down brings to light the pieces of mother of pearl shell, which thus present the appearance of inlaid patterns. The fine surface which can be given to the asphalt varnish, also permits of buruished gilding and other decoration applications with excellent effect.

Papier maché may also be used for relief ornamentation for friezes, etc. The surface to be docorated shomd first be hacked with a knife, and then kalsomined, sawdust being added to the kalsomine, so as to give a rongh surface on which the papier maché ornaments are fastened by means of strong glue. The papier maché should have gum arabic and a little glyceriue added to it. The latter prevents the composition from drying too rapidly. Wild roses, passion flowers, ete., can be adyantageously used for such decorations, which should be painted over with different colored bronzes.

It should be remembered that both in leather work and papier maché, it is desirable to model rather than stamp or mould. The material when properly treated is quite as plastic as clay, and will well repay the efforts mate in learning to manage it properly.

Fig. 31 shows a chair bolster covered with dark brown moroceo which is ormamented in a peculiar way called "raciug." The rosettes, loops, and tassels at the ends are also made of the same material, the first catching together the leather covering which is here gathered and drawn in elose; from fom to five inches are to be allowed in length beyond the measure. To make the raced design (which can be drawn on the leather with a colored pencil, or else transferred) the outlines must first
be carefully pierced out with a sharp penknife; before taking away the raced upper part of the leather, which can be removed either from the desigu proper, or from


Fig. 31.
the ground, the leather must be thoronghly soaked in water at the back, so that the outer part of the skin may draw off easily and the leather be smooth beneath, and the cut design clearly visible.

Fig. 32 is a sofa cnshion decorated in the same way, the working detail being given in Fig. 33. In the model, the leather cover is fastened down by small loops going over pompons (or woolen balls made after


Fig. 32.
directions on page "in chapter on crochet") above a plush strip set on to the erlge of the cushion; larger pompons finish the corners. Brown leather, with brown or fawn colored plush, with nom:
pons, either corresponding or of two shades, would be pretty colors.


FIg. 33.
Fig. 34 is a book cover to be made in heavy leather worked in relief as directed above.

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TO PAINT LEATHER.
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Select leather that has been thoronghly well dressed, draw upon it with a chalk pencil the subject to be painted, and size all over the design. Use the common size brught at an ordinary oil and color shop, melted over the fire and used warm. Paint with ordinary tube oil colors, mixing the colors as for oil painting, and adding to each some japanners' gold size as a dryer. When it is only required to turn the leather black, and it has previonsly been well dressed, it will be so well impregnated with the astringent parts of oak bark as only to

need rubbing over two or three times with a solution of vitriol. A gloss can afterwards be given to this black leather by rubbing it over with a mixture of gum arabic and size melted in vinegar. Should the hack produced by the vitriol mot be deep enough, grind up some lamp black in linseed oil and rub it on hefore putting on the glazing. When small places in the painting require gilding, g vorer these parts with the white of an egs, and attach the er lld leaf to them, having previonsly waxed a piece of tissue paper, taken up the gold leaf on it, and cut it to the size required. When a large surface requires gilding, take some hrown red, grind it in a moller, and mix it wit! water and chalk, and when the chalk is dissolye:l, rub it orer the leather until the whole surface has : whitish look. Attach whole sheets of gold leaf to the tissue paper, and lay them upon the leather before it is dry, taking eare that the elges of the leaves overlap each other Allow the leather to dry and harden, and then polish the gold well, hat lightly rubbing it with an ivory polisher.-From the Ari Interchange.

## HOW TO OlSNAMENY HORNS.

It is not generally known that common ox horns cam he so morke! and decorated as to make both usefnl and ornamental objects. The mollem spelling of lantern is rather mufurtnante, iunsmmed as it loses sight of the origin of that extremely useful article, the lanthorn of King Alfre lis invention, in which thin plates of translucent hora were used to guard that monarch's cantle clocks from the mind.

Drinking horins in earlier days were often decorated profusely, and may fine specimens still exist. In the earlier part of the century, horns were constantly used as powder flasks, and much care was often bestowed on giving them a fine polish, in itself a great ornament, for
ox horns show, when polished, beantiful gradations of color.

As far down as the time of George II, but dating back to the time when printiug was an maknown art, "horn books" were in use in Eugland in the place of the many primers and other elementary books which now flood the country. These consisted of a single leaf, containing ou one side the alphabet, large and small, in black letter or in Roman, with perhaps a small regiment of monosyllables. Then followed a form of exorcism and the Lords Prayer, and as anale, the Roman numerals. The leaf was usually set in a wooden frame, with a slice of transparent horn in front-hence the name of horn book. There was a hamdle to hold it by, and usually this handle had a hole for a string, whereby the apparatus was fastened to the girdle. Sometimes the leaf was simply pasted to a slice of horn. These horm books are extremely rare now. Shenstone alludes to them in his poem, "The Schoolmistress." When alluding to the children he says:-

> "Their books of stature small, they take in hand, Which with pellucid horn seeured are, To save from fingers wet the letters fair."

Horms can be easily softenel in hot water, and, so softened, can be flattened, or otherwise monlderd. But the natural form is so gracefml that one would hardly wish to alter it, muless it be to present a little more convenient surface for decoration. If the horns are procured at a slaughter honse, they will need cleaning the first thing. This is done by soaking them in water, when the pith ean easily be separatell from the ontside. Cups or tankards can be made of them by entting off a section of the proper length. In order to render the horn soft enough to cut, it must be soaked iu boiling water. While still
soft, a groove can be cut on the inside about a quarter or half an inch from the bottom. Into this fit a cireular piece of metal or horn. A little ingenuity will enable one to fit on brass mountings at top and bottom. These mountings can be rendered still further ornamental by either chasing or repoussée work. In their original shape or slightly flattened horns, ean be ornamented in various ways, and utilized for holding flowers, grasses, or made into bonbonnières, or simply hung up as ornaments. To polish them, they should be rubbed with fine sand and emery paper, then with whiting, and finished off with a little sweet oil on a piece of chamois, or with a little sub. nitrate of bismuth, rubbed in with the hand.

The horns, thus polished, ein be either etched on, which is done by coating them with wax, scratching out the design, and then pouring acid and water over the whole or they can have designs painted on them in oil colors, or they can be decorated with ink or stain of no appropriate color. In the latter case, the design shonld be cut lightly in the horn with a very small $V$ tool, and the groore thus made filled with ink or stain by means of a camel's hair brush.
Prepared for powder flasks they would add au important item to the woefully short list of presents really useful and appropriate for gentlemen. A wooden plate should be fastened into the bottom of the horn, and a stopper more or less ornamental to the upper end, which would have to be sawed off a short distance from the tip. A worker in metals could doubtless fasten on one of the patent tops now generally used on powder flasks. A string should be fastened to either end sufficiently long to permit of the flask being worn sus. pended over the shoulder. Either simply polished or ornamented with some of the ancient Celtic or those designs to be found in books on antiquities, this would form a charming gift,

Horn can be stained to imitate tortoise shell as follows:-
Mix an equal quantity of quicklime and red lead, with strong soap suds or a solution of potash. Be very careful in using this mixture as it will burn your hands or clothes. Lay it on with a small brush, imitating the mottling of real tortoise shell. Give the horn several coats of this, letting it dry between each application. Then lay it for a few hours in vinegar and alnm, wash it in clear water and polish. I have not tried it, but I fancy this horn so treated might be used for inlay work on papier maché in the same way that was described for mother of pearl. In connection with a tasteful use of gilding, very handsome articles could be made in this way.


## REPOUSSEE WORK.

One of the latest fashions in decoration art is for hammered metal work. Like most of our present decoration it is but an old-a very old-fashion revived. Benvenuto Cellini, who lived early in the sixteenth century, did much to develope this art in its various branches.

To the uninitiated the idea of hammering metals does not seem very attractive, for it looks like very hard work. But such is not the case. The sheet brass which is principally used comes in a great many degrees of thickness, some of it being very thin. Many of the sheets can readily be sawed by the fret saw into the desired shapes, the embossed or repoussée pattern being then hammered in.

The materials for this work are some pieces of sheet brass, preferably thin, a tool called a tracer, a chaser's hammer and one or more grounding tools. The brass is sold by weight at about thirty-five eents a pound, the tools twenty to thirty cents each. A piece of smooth board is also needed, and a few screws.

Before beginning to work at a pattern, it is absolutely essential to learn to use the tracer well. Metal work differs from most other kinds of decoration in this one thing, it is almost impossible to rectify a wrong stroke. Take some scraps of brass-those left after sawing out a plaque or bellows cover, or whatever other object you may intend working-and having drawn straight
aud curved lines on it with a soft black lead pencil, go over these lines with your tracer, holding the latter perpendicularly and giving it a gentle tap with the hammer. To prevent your brass wabbling it is best to screw it by the corners to a board. In cutting ont objects to be decorated it is necossars, generally, to leave a margin, not only for the serews, but to leave space for the mounting when necessary. At first jou will find the lines you trace to be anything but lines of beanty, but as you proceed you will, with care, improve The traced line should be continuous, never showing any marks of the tracer having been taken up and put down again. The first tracing should be very gently done, so as to make a very faint outline. In embossing a pattern, the outlines have to be gone over again and again at different times. A thoronghly well-drawn pattern is essential in this work. You can either copy it on the brass with a leadpencil or transfer it by means of tracing and transfer papers Be sure, however, before you begin work that every line is aceurate. Having traced all the ontlines very faintly with your hammer and tracer, you are now ready for the gromnding. Your brass must be well screyed down, being sure that you have it very smooth. Your grounding tool shouldlue an eighth or a tenth of an inch in diameter at the morking end, which should be roughened like a seal. Go over the whole of the background with this tool, holling it perpendicularly and strikiug lightly. Work from your outline edges outward in all directions, trying to keep your work equal-that is, to not hammer too long on one side of sour pattern before going to the opposite side Neglect of this precaution will give your work an unsymmetrical look which no subsequent tinkering will remedy. Hammer lightly at first. Heary blows will be apt to result in breaking the brass. As you hammer you will see jour pattern gradually coming out in relief. When the embossing is
sufficiently prominent, unserew your work, and take it to a worker in metals, who will mount it in a narrow, strong, brass frame $A$ jeweler wonld probably be able to do this himself or could get it done for you.

Tuis repoussée work ciln be applied to many uses. Plaques or platters, ormamental false hinges, keyhole plates, bellows covers, pauels and picture frames, and a large variety of other articles of household use or home decoration, can all be easily made when the rudiments are once thoroughly learned. Cups can be mate by working. the brass flat and having it made up and a bottom put in by a tinsmith. The patterns should be bold and conventional. Petty work, always inartistic is peculiarly out of place on metals.

To polish brass, the best way probably is to rub it thoronghly with rotten stone or tripoli and turpentine, finishing it off with chamois leather and oil. In your designs avoid, in the begiming, any unnecessary inside lines. The simple ontlines of a bird or fish are very striki ${ }_{\text {g }}$ and arabesque designs have an excellent effect.

For the benefit of those who aspire to more elaborate work on heavier metal. I will quote the directions given by Mr. Leland, who was the pioneer in the revival of this art in both America and England. Amatems owe him a debt of gratitude for the invention of the mode described above of hammering thin brass. Formerly the only way known of doing respoussée work was by the use of the pitch bed described in the following extract.
"Yon will, as you use thicker sheets. wish to hammer sometimes from the back into the raised patterns, either to produce a deeper relief, or to smoothe and correct inequalities. For this purpose you must make a bed of so-called pitch or composition, which, when hard, yields only gradually under the hammer. You have already learned that in hammering on a soft pine board, it was necessary to work on some basis which resisted while it
yielded. But the fibrous structure of the wood oni. permits a certain decree of yielding. To obtain a deep relief, something must be used, which, while it resists somewhat, or is diffeult to penetrate, must also be gradually peuetrable to almost any extent. For this purpose make a bed of brick dust, or plaster of Paris, fine sand or ashes, or even dust, which is to be thoroughly mixed with pitcb (or rosin), in equal parts with the dust, and a very little tallow or turpentine. Those who supply jewelers' tools generally keep this composition for sale, at twenty-five cents a pornd, in cakes. When the brass is laid on a bed of this, it can be indented very easily on either side, and by turning alternately. If you have a sheet of brass or thin silver cul or plate or goblet, or salver, you can fill it with the melted pitch, or "back it," and can then work easily on the outside. If fou wish to raise a bunch of grapes an inch or two inches, you must hammer them ont from the inside, and then, to finish the work, turn it again, and execute the more delicate parts from the outside. * * * * * * It is advisable, after preparing the bed of pitch, to give it the thimest possible coat of oil. This causes the metal to work better on it. If there is too much oil it will not adhere. It is often necessary in heavy metal and in working deep relief, to anneal the work. This is effected by placing it in an oren bed of coals till it becomes softnot in the least melted, however,-and then removing it very carefully with pincers or pliers. It was with such pincers, usually confounded with tongs, that Saint Dunstan,

> "As the story goes, Once took the devil by the nose,"
while the Saint was annealing metal. Whoever has annealed knows how vexing it is to be interrupted just at the critical moment, and the Evil One, knowing this,
chose that time to provoke the Saint to unsaintly anger. Saint Dunstan, or as the French say, Saint Eloy, instead of giving way to wrath, calmly took Satan by the nose; drawing it out to the great length which it has since had, and destroying the last trace of beanty in the fallen angel. The story was intended to teach all workers in brass and other metals, that they must be very patient, especially in annealing. Annealing oxidizes and softens the metal. While hammering cold sheet brass, the oft repeated blows harden the metal and cause brittleness. This brittleness is removed by annealing, which restores the original ductility or softness. After working, the metal must be cleaned by boiling it in sulphuric acid, mixed or diluted with from six to twelve parts of water. With thin sheets of good metal, annealing for amateurs will not be necessary when making basso-relievos, or very low relief."

Sheet silver can be worked in the same way as brass. A napkin ring or a bangle bracelet can thus be made by an amateur. The most workmaulike way would be to procure the circlet ready joined, and work it on a wooden block wrapped with paper to make it fit tightly, or else to fill it with "pitch;" or it can be worked flat and afterwards made up by a jeweler, who will also solder up any little holes jou may have made. Often the ground of beaten silver will turn black with time, but this adds to its beanty by bringing out the work in stronger relief.

Simple designs may also be engraved on silver by the amateur. The work is done with a graver similar to that used by a wood engraver. Practice on a piece of zinc, cutting perfectly straight lines, cutting them lightly or more deeply at will. Vary this with curves and spirals.

Metals may also be etched. The directions giren by the author already quoted, are as follows:
"Cover the metal with varnish; let it dry, and then draw your pattern with a sharp point-say, a needle-simply removing the raruish and exposing just so much of the metal as yon wish to show black lines. Put strips of wax around the metal, and then pour on it a mixture of one part of acid to three of water. Brush away the bubbles, as they gather, with a feather, or the lines will be very ragged. Then pour out the acid and water and wash away all the varnish with turpentine. Then you will find four drawing engraved on the shining surface."

As one proceeds in hammering brass, there will be au erer increasing demand for new tools, to fit moto the corners and twists of the design, or to produce a given effect in the grounding. If bought, these will cost a considerable sum, but they can easily be


Fig. 8.
manufactured at home from square steel rod, or wire, sold at the tool shops for this purpose. Cut
this into pieces about four inches long by means of a triangular file. Thin both ends a little, and by means of a file form surface of one end into the shape required, square, convex, gonge-shaped, etc. Harden it by heating to a yellow heat and dip into oil or water.


Fig. 36.

Sectional patterns are given for small waiters, or plaques. A fine collection of designs by Mr. Leland by the Art Interchange, have been published which will be of great service to those pursuing this art.

It should be added that all lines inside the design should be worked before the ground is hammered, as the brass cannot be worked after it has been hammered into relief,

In Fig. 37, is a border which can be adapted to several uses.


Fig. ${ }^{57}$

## 'RO TRANSEER PATLERANS.

There are several ways in which designs may be tramsferred to the material on which they are to be worked. The first and easiest method (short of drawing it free hand) is by means of tracing and tramsfer paper, both of which ean be obtained from an artist's materials store. Tracing paper can be made as follors:

Lay the sheets to be prepared flat on each other, and spread varnish made ley dissolving Damara resin in spirits of wine over the mpermost sheet by means of a brush, matil the paper appears perfectly colorless withont. however, the liquit therein being discernible. The first sheet shonld then be hong up to dry, and the remainder treated the same way. Rather tongh, smooth paper should be used for this purpose. A good supp!y of this is very useful for any one who does much decoration work whether with needle or brush, as hints and ideas can be lastily traced and thas preserved for future use by those who have not the time to copy a design, nor the skill to sketch it quiekly.

Having tracerl the design, phace it on the object to which it is to be transferred, finstening it securely in place with pins or thumb tacks. Now take a piece of transfer paper, it need not be large, and place it 150
color side down, betwen the tracing paper and the material to be stamped. Go orer the lines of the tesign with a sharp pointed hard learl pencil, a dull stiletto, or some similar uteusil. Slip your transfer paper along so as to go orer every line of the design. Before remoring the thmmb tacks entirely, lift the tacing paper and examine whether the design has been thoronghly transferred.

In msing transfer paper be careful about using a new piece on hamlsome gools as the color comes off in umlesirable places.

When possihle, it is far hetter, howerer, to dram your pattern direcotly on the material, sketehing it at first lighty amh when all is correct, golng orer the lines with either India ink, or with a common pen and ink.

For rery handsome material, it is safer and more convenient to have the stamping done by those who make a business of it. As there are some, homerer, who cannot conveniently have this done, I will give another method called pomeing. Having dramor or transferred the pattern on to stiff drawing paper, prick the outlines carefnlly with a sharp knitting needle, or stiletto or stiteh it on the machine, nsing a rather coarse needle. Then haring rery carefnlly and firm? fastened it in position, brinsh flomr, or starch (if the gromul be (lark), or powdered bluing, or artists' charonal ovor the lines. It can be put on with a soft brush or flamel pad. Remore the pattern carefullr, aml go over the lines with a fine paint brush, or stiff pen with India ink or some snitable water color. If the latter is used al little gum in the water used for mixing the color will ensure fon against the rubbing out of the Iines. Brush off the superfluons powder and jomb pattern is secure.

Designs can be easily enlarged in this way.
Cut a piece of paper the size of the space to be decorated, preserving the proportion between length and
breadth. Mark this off with perpendicular and horizontal lines. Divide the pattern by an equal number of lines, and you will find it easy to copy the whole on the larger piece of paper. If done carefully, the proportion of each part will be maintained.

## NETTING.

Like many other kinds of fancy work, netting is just now coming into fashion. Our grandmothers netted, as our mothers tatterl, industriously, netting boxes and stirmus being as familiar a sight then as the tatting shuttle was some fifteen years ago, and as the crewel and silk cases are now. It is a work that can be applied to a great variety of purposes, from curtains down to fichus or breakfast caps. Guipure l'art which is worked on netted squares has always been in favor, but its seeming difticulty has deterred many from attempting to make it. The following directions for plain and fancy netting and for making Guipure stitches are made as plain as possible, and will be found easy to follow when the manner of forming the netting stiteh has been once mastered. This can be learned from the directions, but is much more easily learned in a lesson from one who understands netting.

Yon will need for this work, a netting needle, a mesh, and twine, cotton, or linen thread. Formerly, the netting was fastened to a braid or ribbon loop, called a stirup from its being beld on the foot, but a more con153
venient and much prettier way is to have a lead cushion or sewing bird for securing the lool. Some, howerer, pin it to the knee, as in sewing. For beginning I would advise some twine or coarse knitting cotton, as is it very much easier to learn anything in coarse materials, where the details can be easily seen.

A woolen netting needle is generally used for coarse, and steel ones for finer work.


Fig. 38.

When a rery small mesh is used, a long blunt darning needle must be employed as the filled netting needle would not pass throngly the loops. The meshes are made of boxwood, bone, ant irory; they can be cither round or flat. Knitting needles of various sizes in these materials make good meshes, steel ones being employed for fine work. Pieces of whalebone cut to the requisite width make good meshes. The size of mesh and cotton must be adapted to each other so as to give the work just the right appearance, neither too open nor too close.

To begin work, take a piece of thread of the same size you are going to use in nettiug, tie it in a loop of three or four inches long and fasten it with a pin to your cushion, or knee. Then unwinding two or three lengths from your needle, tie the end securely to this loop. Take the needle in the right hand and the mesh in the left; hold the latter horizontally between the thimb and forefinger. Lay the working threarl orer the mesh downwards round the midlle finger of the left hamd (Fis. 38), and then between the mesh and the forefinger, a little fowards the left, where the left thumb encloses the thead, and by that means the loop lield romud the mesh and finger is firmly held; then the needle is carried again towards the right, and pusherl from underneath through the threadloop lying romd the left hand, forming a wide seallop with the thread; then the neelle is placed under the loop, and between, the finger and mesh again through the foundation stitch; keeping the left hand quite still, draw the needle quite through with the right hand, dropping the loop off the fingers one by one, the little one being the last to release the loop, drawing the knot to the top of the mesh with the right hand. Make as many foundation


Fig. 39.
stitches as jour work requires, take the mesh carefully ont, turn the work and proceed as before, putting the needle, at each stitch successiyely into a stiteh of the
preceding row. Practice will soon enable you to mase your stitches of a uniform size. The stitch here described is the one ordinarily used and is called Janling netting. To work romul netting, put the needle throngh the loop without changing the place of the finger or loop, turn the needle round and put it into the stitch of the preceding line from above downwards, as shown by the arrow in Fig. 39.

The working threal must remain on the right hand of the needle, and the stitch is then drawn up in the usual manuer.


Fig. 40.
For loop netting, work two rows of ordinary netting. In the third row work two stitches into one, twist the thread twice round the mesh. Repeat for the required length.

4th row: Work two loops into the long stitches of the last row, twist the thread twice rond. Repeat to the end of the row, and continue working only the fourth row.
Figure 41 is for working diamonds in round netting. The number of stitches for each diamond is five and one over at the end.

1st row: Work jour stitches as described for round netting. Work one long stitch by twisting the thread twice round the mesh. Repeat for the length required.


Fig. 41.
2nd row: Two long stitches, three round stitches, one long stitch into centre of first loug stitch, one long stitch into next romd stitch. Repeat from*
3rd row: One long stitch* two round stitches, one long stitch into next long stitch, one round stitch into next long stitch, one long stitch into next round stitch. Repeat from *

4th row: Tro round stitches, one long stitch, one round stitch, one long stitch. Repeat from beginning of row.

5th row: One romid stitch,* two long stitches, three round stitches. Repeat from*

6 th row: Three round, * one long, four round. Repeat from *

7th ror: : One round, * two long three round. Repeat from * ${ }^{\text {- }}$

9th row: One long, two round, one long, one round. Repeat from the beginning of the row.

10th row: Two long, three round. Repeat.
This completes the diamond. Repeat the ten rows until jour netting is large enough.

Au extremely pretty ellging (Fig. 42 ) is worked as fullows:

Work two rows of plain netting.
3rd aow: Work three stitches into one of the previous row, one stitch, oue stitch into each of the successive stitches. Repeat thronghont the row.

4th row: Plain, working throngh the clnsters of three stitches together as one stitch.

5th row: Plain.
6th row: Like third row, working the clusters of stitches between those of third row.

7th row: Like 4th.

rig. 42.
8th row: Work into two stitches together below the clusters of sixth row, work one into all the other stitches.
9th row: Work over a mesh rather more than half an inch in width four stitches into one stitch of last row, pass over three stitches and repeat.

10th row: With the mesh first used, work one stitch into each of the four worked into one stitch, take the next loop, pass it through the centre of the three stitches
passed over in the previous row, work one stitch into it. Repeat from the beginning of the row.

The manner of passing the long loop through the centre of the three stitches is clearly shown by the thin line in the pattern.

This pattern is very pretty for edging a scarf for the neck. It shonld be worked in rather fine linen thread.

## cruss netting.

Ist row: Plain netting.
2nd row; Net alternately one long and one common stitel.

3rd row: Work entirely in short stitches which natmally draw nuevenly.

4th row: Consists alternately of long and short stitches, but insteal of working them in the usnal way draw a stitch of the last row through the long loops of the second row aud net it; contime to work a long and short stitch alternately in this may through the row. Repeat the third and fomth rows alteriately.

## STAR NETTING.

Cross and star netting rery minch resemble each other; after working the cross, little difficulty will be found in working the star netting.

1st row: One domble anl one plain stitch alternately, using a knitting needle mesh.

2ud row: Net plain with a mesh one third of an inch wide.

3rd row: Dram one stitch of second row throngh loug loop of first row, net it again with a short stiteh, draw the next loop through the same long loop of first and net it with a long stiteh (i.e. cotton twice ronnd the mesh). Repeat the second and third rows for length required.

## ROSE NETTING.

This pretty stitch seems a little complicated at first, out by following the directions exactly it can be easily worked. Two meshes are needed for this pattern, bearing to each other the same proportion that a coarse knitting needle would to a mesh one third of an inch wide.

1st row: Net plain over the wide mesh.
2nd row: Net over the small mesh thus: First diaw the first long loop through the second and net it, then draw the second through the first and net it.


F4g. 43.
(Fig. 43.) shows rose netting with ribhon relvet run in at each fifth pattern and the intermediate rows are darned with colored silk.

## HONEYCOMB NETTING

An even number of stitches is needed for this pat tern.

1st row: Plain wetting.
2nd row: Net the second stitch, then the first, next the fourth, then the third and so on throughout the row.

3rd row: Plain.
4th row: Net a plain stitch; begin the pattern by netting first third stitch, then the second, next the fifth, then the fourth, end with a plain stitch and continue to the end of the row. Repeat from the first row.


Fig. 44.

Fig. 44 is a very pretty border combining the last tro patterns with plain netting. The rows of honeycomb are alternately of fine and coarse material, or of silk and wool, in order to bring out the pattern. The scallop, pattern is worked with heavy silk doubled or trebled.

1st row: Plain netting with small mesh.
2nd row: Work four plain stitches, work four loops into the fifth stitch. Repeat to the end of the row.

3rd row: Work three plain, work the clusters of two loops together. Repeat from beginning of the row.

4th and 5th rows: Plain.
6 th row: Like second row, beginning with two plain stitches to alternate the position of the clusters.

7th row: Like third row, working the clusters in their proper places.
8th and 9th rows: Ilain.
Five rows of honeycomb pattern are now to be worked.
Work three rows plain netting. Two pattems of rose netting; and for the edge one row a larger mesh and the two strands of the working material.

In making joins in the thread, as when refilling the needle, or if in silk netting the colors are varied, always manage to have the knot come at the outer edge. Tie a firm flat knot.
Netting is darued by passing the needle muder and over the stitches of the foundation about five times, taking eare to follow the lines of the pattern. The silk, cotton or thread, used in darning must be of a size pro. portioned to that used in the netting.

Round netting as for purses, etc., is worked by passing the needle through the first stitch, while keeping the last three or four on the mesh, moving the mesh as the work requires.

## VANDYKE NFTTING.

Make one loop on foundation; net two loops in this. Increase one loop in erery row until there are five loops in a row. Then increase at the end of every alternate row until there are nine loops in the row, taking particular care to always increase on same side of the work.

In the uext row leare four loops unworked on the side which has not been increased, work the other five loops and repeat.

## FLY NETTING.

Wind on the needle a strand of wool and one of silk, so that they will unwind together. Net as with a single thread, and when the netting is done, eut the woolen thread round every knot, fluff it up so as to conceal the knot and make a little ball. Be very careful not to
cut the other thread. This is very useful for neckties, head Iresses, etc.

NETIED HAIR-NET.
This net may be made either of chenille, silk, or fine braid, with a mesh half an inch in width.

Net eight loops on a fondation, then net sixteen rows; these will count perpendicularly eight diamonds; cut the netting from the foundation, but do not cut off the material you are netting with; pick out the knots; tie a loop of cotton into the centre of the square, by which to pin it to the table; now net round this square eight rows or four diamonds, connted perpendicularly; the net is then complete, but more rows may be worked if preferrerl. An elastic is run through the last row of holes. The net is ornamented at the top by a double bow and ends of ruby satin ribbon.

## DIAMOND PATTERN.

Fig. 45 is a very useful pattern for stripes for tidies, shawls, etc, and may also be used in place of drawn work in bureau and side-board scarves.

1st row : Plain.


Fig. 45.
2nd row: Work two loops into a stitch, draw the next loop rather longer, and repeat to end of row.

3rd row: One stitch into efich loop of last row.
4 th row: Work a stitch through two loops together or under the two loops worked into a stitch in the second row. Repeat to the end of the row. The double loops are worked across with needle and thread as shown in the upper part of the cut.

ROSE AND SHEAF PATIERN.


Fig. 46.
With a fine bone knitting needle for a mesh, work three rows in plain netting.

4 th and 5 th rows: Rose netting.
6th and 7th rows: Plain.
Sth row: Fill a netting needle with a three-fold strand of thread, that is winding from three spools at once, and with a mesh a little more than an inch wide, work one stiteh into each loop.

9 th to 11 th rows: With the small mesh and single cotton work one stitch into each loop.
AND HOW TO USE THEM.

12th row: With donble cotton, work one stitch in found netting into a loop, cotton twice over the mesh, pass over a stitch and repeat.
The sheafs are canght together by crochet. Work one double over three triple loops, seven chain and repeat.

A double length of cotton is darned in a straight line above and below the two rows of rose pattern.

## GUIPURE D'ART.

While netting has rather fallen out of favor of late years, the beantiful Guipure d'Art which consists of netted squares worked with various ornamental stitches is as much admired as ever. Althongh looks extremely difficult, it is really very easy of execntion, and fully repays one for the trouble of working. The popular word "effective" so much in vogue now is very applicable to Guipure netting, drawn work, and Macramé lace, all of which are really very easy of execution, in spite of the elegant and complicated appearance of the work.

For this work a frame is necessary on which to stretch the uetted foundation. This should be made of strong wire soldered together, and can be made by a tinsmith. It should be large enough to stretch the uetting tightly. For insertion or edging, an oblong frame is used. The netting is generally done with linen thread, which must be of a size regnlated by the foundation. A common darning or tapestry needle may be used for the lace stitches. Great accuracy is essential in this work, as a wrongly placed stitch would spoil the whole effect. It would be a good plan to practice the different stitches given on a square which can be kept for a sampler.

The square is netted as follows. Begin with two stitches, and net backwards and forwards, always increasing every row by making two stitches in the last stitch of the row, until you have one more stitch than the number of holes on one side of the finished square. Thus, if one side of the square has five holes, you must net six stitches on the mesh; then net one row plain, and then decrease at the end of every row, by netting the two last stitches together in one knot, until you have only two stitches left. Join these together with one knot in the middle, not making a stitch, but carrying the thread tight across to the joining knots.

Sometimes the pattern calls for a foundation in holes of two sizes. This is formed by putting the thread round the mesh twice for the large hole and once for the small.

In working the different stitches given, the thread must be carried alternately over and under the netted threads; the work mast be uninterrupted, and the thread fastened with a firm knot; and when it is impossible to pass immediately from a filled up part to the next hole of the netted ground, the thread must be wound round the threads between that and the next hole to be worked as carefully as possible, so as to be almost imperceptible.

The square to be worked must be tightly stretched in frame. This should be covered with ribbon or muslin to which the netting is laced, the lacing thread passing through the double edge formed by the increasing and decreasing stitches. It is well to fasten the corners first, as that makes it easier to draw the threads perfectly straight and true.

## POINT DE REPRISE.



Fig. 47.
This stitch is employed in almost every pattern; it is a simple darning stitch. The illustration shows the manner of working it. The holes are entirely filled up, threads passing alternately over and under the working thread.

POINT DE TOILE, OR TRELLIS WORK.


Fig. 48.
In working this stitch great care mnst be taken to make the threads cross each other evenly. The number of threads in a hole must be regulated by the size of the hole; but there must be the same number of long and cross threads and the numbers must be eventwo, four, six, etc.; an odd number of threads would spoil the work. The cut shows how it can be worked both continuously, and when holes are missed.

## point d'esprit, festoon stitah.

This stitch needs no explanation, the illustrations


FHg. 49.
showing the mode of working it. It admits of many variations which can easily be copied from the design. Sometimes the whole ground work is filled in with this stitch.


Fig. 50.
Fig. 50, gives a combination of point d'esprit and point de toile:

POINT CROISI, CROSS STITCH.


Fig. 51.
Fig. 51 shows the mode of working a crossed thread with a tied knot, which fastens all the threals at the
crossing point. It is a buttou-hole stitch, ouly the stitch is put in over instead of next to the starting thread. For the double thread cross (Fig. 52) stretch the first loose thread for two bars of the cross lying near


Fig. 52
each other, then return as far as the middle only. Twist the thread ronud the latter, from here going always forwards and backwards to form the third and fourth bars; then unite all the four bars by one stitch, and then twist the thread a few times round the first bar with a single thread and finish. After nniting the cross-bars, it will be easy to make a little round pattern in the middle by drawing the thread round the cross.

Fig. 53 shows how to work a half cross stitch in rows.


Fig. 53.

## SPINNING STITCH AND WHEELS.

These patterus are generally worked over four holes of the netted square at the crossing point of the crossbars stretched across, and either unite the eight radii
or meet over these in the centre of a netted hole with the thread wound round. This winding round is so contrived that the wound bars lie underneath the threads of the fomndation, and the stitch is on this arcount called a web.

Fig. 54 gives the manuer of making a web, which


Fig. 8.
is shown finished and surrounded by picots in Fig.


Fig. 6.
55. The manner of making these picots is shown in Fig. 56.


Fig. 06,

## PYRAMID STITCH.

Fig. 57 gives the manner of working this stitch with two divisions: Tie the thread on with a knot, carry it as far as the middle of the outer netting thread of the pattern, fasten it for a triangle again


Fig. 57
to the middle hole returning. Winding the last thread backward, the point of the triangle is reached, and the bars must now be closely worked in point de reprisé. The stretched thread can be carried along the netted thread forming the base of the triangle as far as the middle, and is then carried up to the point. This makes the finished work show three divisions.

MUSEROOM STITCH.


Fig. ${ }^{5}$.

The illustration will enable anyone to copy this stitch, without further description.

Fig, 59 gives a square containing double point d'es-


Fig. 39.
prit between the different arrangements of mushroom stitch.

## TUFTED BUTTONHOLE STITCH.



Fig. 60.
This stitch will be easily worked from the design. It is a pretty stitch for the border of a square as in Fig. 61.


Fig. 61.


Fig. 62.

This is a combination of mushroom stitch and is used in the square illustrated in Fig. 63.


Fig. 63.

In this square, the thick part can be easily copied by any one who has studied the preceding stitches. The two squares illustrated can be used alternately to make an insertion, heading for guipure lace, or four joined together will make a pincushion cover. In this case it may be edged with a netted border, for which patterns have been already given.

Fig. 64 is an easy pattern for an insertion, or it can be used for a borter by buttonholing the
edge. Very handsome counterpanes pillow and shams


Fig. 64.
are made of squares of guipure, lined with silk or satin.

DOUBLE CROSS.


Fig. 65.
This is very effective for the middle of a square or even for a corner. The loose threads must be first stretched across from one side over the hole of the netting, and a bar wound round in the opposite direction, weaving it with the first bar as shown in the design.

## GULIPURE IN RELIEF.

Fery effective patterns may be upon a ground of point de toile, or eren upon plain netting. They consist of loose threads stretched over the founda. tion, and worked in like the point reprisé-for small patterns, over two threads, with one division,-for broad patterus, leaves, etc., with two or three divisions over three or more threads. Leaves should be graduated. Stalks on leaves, or sometimes raised veins, are formed according to the thickness required of threads stretched across, wonnd once or several times round, and closely corded in returning. The large patterns require a thread of the foundation to be worked in here and there lightly, to keep the guipure better in place.

Fig. 66 shows the way of morking these relief stems.


Fig. 66.

## BUTTON-HOLE STITCH.

This forms a pretty scallop border, and is particularly useful for edgings. Stretch the thread firmly round the netted thread and tie it always with a cross-stitch. Returning it must be closely twisted again, and then fastened with button-hole stitch. Picots may be worked
in this edge by simply making another separate buttonhole stitch, which lies free underneath, and is fastened to the next in continuing the row. This edge must be

worked very carefully, so that when the threads of the netting are cut away the stitches will remain in their place.

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STAR ON RADII.
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Fig. 68.

This can be worked from the illustration. Stretch bars as for a wheel, the ends of which must again have cross-bars for rounding the star. The wheel is worked on the cross-bars and then the radii arranged round, crossing them at the back of the wheel where they are fastened with one or two button-hole stitches.

> OBLONG NETTING.

For edgings, the foundation must be netted, so as to form an oblong strip. To do this, begin with two stitches
as in the square, and increase on every row, until there are two more stitches than are required in the width. Then go on increasing on one side, but decrease on the other, so as to keep the number of stitches always the same. When you have the required length decrease to two stitches, as for the square. The increasing must always be on the same side of the netting, and it is well to tie a bit of colored silk on one side so as to mark where the increase is to be made.
The different stitches given above will enable one to copy any pattern without further directions, as they are merely various combinations of these.
The work is elegant and durable, not trying to the eyes, and possesses the adrantage of demanding so few materials, that it is easily carried about, and makes but light demands on the purse.

## DRAWN THREAD WORK.

This work, like netting, dates very far back, and many old and beautiful specimens are to be found in different public museums. Extremely fine work, resembling Honiton sprays on a net fommation, has been done in this style, but the work is too intricate and involves too much strain on the eyes, to find favor now-a-days. Very beautiful effects can, however, be produced, without unduly straining eyes or patience. It is always best to begin on coarse material, as the stitches are much more easily mastered, than with fine Iinen. Crash, Jara canvass, and rarious grades of linen are used for this work. It is ornamental enough alone, but it is often associated with outline, Holbein, or Russian embroidery. Colored or golden silk and crewels are also used instead of thread and often with very good effect. Some very fine work of this description is done in Mexico, and it is sometimes called Mexican work. Another name for it is "Punta Tirata. "

Hem-stitching is the simplest form of this branch of fancy work. In olden times most children were taught to hem-stitch as part of the systematic training in needle-work then considered necessary, but for the benefit of those who have not learned, I give the following dipections, repeating the advice to begin
on rather coarse material. A bireau cover or a stand cloth of butcher's linen, cotton momie cloth, or erash, is a good thing to begin on. Measure off a good depth for your fringe. If you wish to knot it, allow two or three times the length of the finished fringe.

Half an inch from the fringe, draw the cross or weft threads ont for a distance of about three-quarters of an inch. Leave a bar at either end which should be neatly buttonholed with linen thread.

Thread an ordmary sering needle with No. 70 cotton; beginning at the right hand, pass your needle under four or five warp or lengthwise threads, draw it up at the left hand, and passing back to the right hand take a fine hemming stitch, and go on as before. This is for the upper line. The lower one is done in the same way, only reversing the hemming stitch. Maving hem-stitched both sides, take a needleful of rather coarse linen thread, about twice as long as the width of rour work. Fasten it securely to the centre one of the end bars; fasten three of the clusters of threads together with a loop-stitch, which is formed by passing rour thread over the clusters, and (making it describe a large scallop below your work) put your needle at the right hand in above the working thread, passing under the clusters, and bringing it ont below the working thread, and inside the scallop formed by the loosely hanging thread. Draw this up so as to form a firm knot, and go on to the next cluster. When finished, the comnecting thread should appear as a perfectly straight line, neither tight enough to pueker the work, nor so loose as to look untidy. Where a greater number of threads have been drawn, hasing fastened the working thread as before, pass over eight clusters, and putting rour needle in, bring it out again between the fourth apd fifth clusters, putting it in again on the
right hand of the first cluster and draw it out again at the left of the first four clusters. Draw it through and repeat. This stitch is extromely simple and is generally known, having been in common use for Java canvass work, as well as for linen. Where artieles are to be sulbjected to much washing, it is not as desirable as the various arrangements of thread clusters by means of the knot first described.

Other arrangements of drawn threads are shown in Figs. 69-72.


Fig. 69.
The manner in which these designs are worked is so easily seen in the ents that a written description would be superfluous.

The worker can employ her own ingenuity in devising new combinations, while the use of colored wools, and the addition of rows of Holbein stitch, lepd interest and variety to the works


Fig. 70.


Fig. 71.


Fig, 72.

## DRAWN THREADS AND SPUN STITCHES.

For this pattern a frame is mecessary. One used


Fig. 73.
for guipure netting will do, in which the work must
be strained, after the threads are drawn and the hemstitching done. Care should be taken to have the material stretched tightly, so that the clusters of threads will be perfectly straight. The work can be basted on a piece of stiff paste-board instead of being stretched in a frame. In this case, the work should be firmly fastened to the card-board, care being taken to stretch it tightly.
Draw all the threads of the material out of one way to the depth of three inches and a half; divide the strands into sizes by working over the edges of each with a slanting loop, for the entire length, theu crossing this line of stitches with a second


Fig. 74.
one (see top of design); next work the straight bars, seven-eighths of an inch from the edge, top and
bottom, and one line straight across the centre for the entire length of your work; these are the foundation threads to work your pattern to. The knots and loops forming the oval are the next part to work, and the spun stitches are made by interlacing these loops. The arrow indicates the mode of forming these stitches.
These patterns, while effective and very handsome, are very easily worked. The most tiresome part is the drawing of the threads, and the hem stitching. It is rather improved by washing than otherwise.

Fig. 74 is a combination of drawn work, and the


Fig. 75.
stitches used in gnipure d'art.
Fig. 75 shows the manner of forming the square holes in which the stitches are to be worked, just as in guipure d'art. It would be well to $\operatorname{try}$ this
pattern on a spare piece of linen, so as to be sure of drawing a sufficient number of threads. If too many are drawn, the extra holes can be worked with some of the many fancy stitches given under the head of Guipure Netting.

I have already, under the head of "Ontline Stitch," given hints as to many articles in which drawn work may be effectively nsed, but a few more suggestions may be useful. A very pretty apron can be made of a huck-a-back towel which has fringe and one or two bordering stripes. Draw the threads for about half an inch through the centre of each stripe, and work them with some simple arrangement of the threarls. Knot the fringe. The upper end of the towel devided into three parts gives a pocket, and the ends of the strings, all to be worked to correspond with the aprou.

Many handsome table-cloths are further ornamented by bands of drawn work, and when in use are placed over a cloth of red cotton flannel. A scarf for the sideboard is very handsome bordered with bands of dael drawn work and handsomely knotted fringe. An appropriate motto worked in old English text adds much to the beauty of such a cloth. "Good Diet with Wisdom best Comforteth Man" is good for this purpose, or Macbeth's advice "Now good digestion wait on appetite, and health on both."

The homely saying "Prayers and Provender hinder no Man," is another good motto, which might appropriately be worked in rustic letters.

Fig. 76 is a case for working materrals the outside of which is worked from Fig. 69. It is to be lined with a bright color and furnished with pockets, leaves for needles, and strap for scissors. The ontside may be of linen or pongee, which is a very satisfactory material for this work.

A pattern that can be used for the same purpose is worked as follows:

Draw warp and woof threads ont so as to form a suc. cession of open squares, leaving sixteen to twenty threads between each. Buttonhole round the outer edge, or if a hem is used as a border, lem-stitch it neatly round. Fasten the thread firmly to the edge, and loop twice into each side of the first square, and


Fig. 76.

when you come to where the threads are left, divide them in half and loop through one half of them. Cross the thread over the mudrawn parts, and continne till all the squares are worked round and the left threads are secured. Work three buttonhole stitches into each looped stitch. Join the last buttonhole stitch to the first, thins forming a wheel, and carry your thread on (concealing it as much as possible) to the next square, which work in like manner. Ruffles or flounces worked with two or three rows of this pattern form a beautiful trimming for white dresses, and it also makes a hand. some border for linen cambric handkerchiefs, d'oylies, etc. Fig. 72 is a simpler form of this pattern.

Figs. 78 to 81, give patterns for a different style of


Fig 77.
work. Worked on some of the softer linen materials,


Fig. 78.
such as momie or oatmeal cloth, it is not at all difficult


Pig. 79.
of execution, though, of course, it takes much more
time. Grasscloth d'oylies bordered with this work, executed in gold thread and one or two colured silks are very beautiful.


Fig. 80.


Tig. sl.
For Fig. 82 the threals have been dratron so as to form regular squares which are worked alternately with point de reprise and point d'esprit. It is meant for a cloth for the centre of the table to be laid over a handsome colored table cloth.

Very handsome side-board or bureau scarves may be


Fig. 82.
worsed in oatmeal or momie cloth, with three or four shades of brown carpet thread, using open designs, such as Fig. 70 or 73. The plain strips between the rows of drawn work should have decorative stitches or some conventional design in outline worked with the different shades of the linen threads. Fringe tied in Macramé knots forms an appropriate fimish for such scarves.

## MACRAMÉ.

This work used to be quite extensively used, at one time, in England, under the name of knot work, which designation is most appropriate, as it exactly describes the manner of making this kind of lace. In Italy it was used for trimming priests' vestments in the fifteenth century, and the name for it there, punto a groppo, or groppino, was also taken from the method of working it. Macramé is from an Arabian word which signifies a large cloth with a fringed border.

Most Macramé lace or fringe, now-a-days, is worked with a species of twine or cord, although it can be made of coarse thread or silk. The different knots are used also in knotting the borders for towels, or as finishing edges to drawn work.
Macramé is sery rich and effective, and possesses the rare advantage of exerting no strain on the ejes. It is easy and quick of execution, and also affords the worker the pleasure of forming new combinations in different parts of the work. It is well to begin working with quite coarse material. The real Macramé cord, manufactured by Messrs. Barbour and Co. is made of flax and is rather softer to work with than other cord, not being hard twisted. The natural color of this cord is also very pleasant. Seine twine is much used also, and some pre-
fer its écru color. It is also inuch cheaper. It is, bought by the skein, varying in weight according to the size.

Before loginning work, a cushion or desk must be provided. Very convenient patent desks can be bought for two or three dollars. A home-made cushion or desk, however, will do equally well. If a cushion is used, it should bo very firmly stuffed, as it is impossible to do work nicely on auything but a hard cushion. It should be about fifteen inches long, four inches high, and five inches wide. Some put a piece of lead or some sand at the bottom of the cushion, but I hare never found any difficulty in working with a cushiou made in the ordinary way. The cushion can either be corered with some bright color as turkey red, or with ticking, the stripes of which should run lengthwise of the cushion. A second piece of stuff can be sewed to the bottom of the cushion on three sirles, thas forming a pocket in which the extra strands of cord can be kept.


Fis. 83.
Some preter working un a desk or board. Snch a board should be of the same size as the top of the enshion just described. Corer it with several layers of wadding and over this stretch tightly a cover of stont muslin. A ticking or colored ontside cover may then be put on.

Besides the cushion you will need a number of large pins. They shonlil be abont tro inches long.

Fig. 83 shows the stitches or knots with which the different patterns are formed. At the extreme left the anamer of putting on the working theads is shown

The cords or leaders on which the knots are worked must be donbled and have a knot tied at the dombled end. A pin thrust through the loop thus formed fastens it to the pillow. Each leader must be, after it is doubled, a little longer than the finished work is to be, and each working thread after donbling, wust be, as a rule, about three times as long as the depth of the tinished work.

After the working threads are set up they are knotted to a second leader, as seen in the same illustration. To work it, pass the thread (one length at a time) under the leader, wind it once orer the leader, bringing the thread ont at the bottom at the left. Now pass it round the leader to the right, and bring the thread ont through the loop, thus forming a knot that will not slip. This knot is used in forming the leares and rosettes to be found in most patterns. It is also worked perpendicularly.

## SINGLE CHALN.

Take two threads, hold one straight in the left hand, knot the other thread on to it once with the right; hold this thread straight in the right hand and knot the other on to it with the left. Repeat. The second figure in No. 83 shows this knot.

## DOUBLE CHAIV.

This is made like single chain, but with four threads, using two each time instead of one.

## OPEN CHAIN.

Take four thrends, commence with the two at the left side, hold the first of these in the right hand as the leader, knot the second twiee on to it with the left hand, pass the same leader to the left hand, knot the same thread as before twice on to it; take the next two threads, hold the first thread in the right hand as leader, knot the secoud trice on to it, pass the leader to the left
haud, knot the same thread as before twice on to it, hold the leader still in the left haud and knot the first leader twice on to it with the right hand, knot the remaining thread at the left side twice on to it, leaving a lonp before drawing it up tight. * Pass the same leader back to the right hand, and knot the same thread twice on to it with the left hand. Then take up the two threads at the right side, hold the under one in the right hand, as leader, knot the other thread twice on to it leaving a loop as before. Pass the sime leader to the left hand, and knot the same thread tirice ou to it. Hold the leader still in the left hand, and knot the leader at the left side twice on to it. Knot the remaining thread at the left side on it, leaving a loop as before. Then pass the leader back to the right hand and knot the same thread twice on to it. Repeat from. * A modification of this chain is seen in the fourth figure of the cut.

## to make leaves or rosettes.

The right hand figure shows the mauner of working very plainly. Take the required number of threads, say three; take the first at the left hand and hold it in a slanting direction in the right hand as a leader; knot the second thread (comnting from the left haml) on to it, then the third; take the first left hand thread in your right hand, as a leader, holding it parallel to the leader; knot the other two on. Take the three next threads; hold the right hand one in the left hand as a leader, holding it so that it will slant at the same angle as the leaf just made. Knot the two threads, taking them from right to left on to this leader; take the thread that now lies on the right haud and use as a leader, holding it parallel to the row just worked. The next step is to mite these leares by a Solomon's knot, which is described belor. Repeat the process

a'ready described, only reversing the direction of the leaves.

## SOLOMON'S KNOT.

This is the second of the two knots usea macramé and can easily be worked from the illustration. Take four threads, hold the two centre ones straight; it is more convenient to tie the two centre strands in a slip knot and fasten it to one of your dress buttons or pin it in place, so as to hold it firm; pass the thread at the left side loosely over these. Take the thread at the right side, pass it over the first thread and under the centre ones, and up through the loop at the left side; draw this knot up tight. Then take the right hand thread, pass it over the two centre ones loosely; take the left thread, pass it orer this, under the centre ones, and mp throngh the loop at the right side; draw it up tight to meet the first part of the knot. This forms one completed knot. To make a raised picot, which is generally used between two leaves, work six Solomon's knots with two threads from either leaf, using the centre ones as leaders, and the ontside strands as working threads. Pass the two centre threads back through the opening between the two leaves; take one of these threads and knot it once to the thread at the left side, take inp the other and knot it once to the remaining thread at the right side.

## PICOT HEADING.

Place two double strands round a large pin and make two Solomon's knots; then put on a leader. This can be varied by working a double chain iustead of the knots for a heading.

To work a spiral cord, work one half of a Solo. mon's knot continuously over the centre strands.

WAVED BAR.

This bar is formed of four strands; knot the left hand thread five times over the centre strands; then the right hand fire times over the left hand, and repeat.

A very simple pattern to begin with is worked as follows:

Fasten on 24 double threads, making 48 working ones. Knot on to a leader (the length you wish to make the fringe). Cut your threads a little more than a yard long. Work one row of Solomon's knots. Put on another leader. Take four strands. Take the right hand thread in your left hand in a slanting direction, and knot the other three threads on. Take four more strands, use the left hand thread for a leader, slanting it to the right, knot the remaining three threads on it.

You have now eight working threads in use. Take the two centre threads, and work a 'Solomon's knot with the tro threads lying respectively on the right and left of the centre threads. Take the extreme left haml thread, which was the first leader, and holding it in your right hand, knot three threads on to it with the left hand. Take the second leader, hold it in the left hand, slanting it to meet the one just worked, and knot seven threads on; this will finish one diamond and begin another.

Now divide the eight threads with which you are work ing; take the four at the right side, hold the first left hand oue in the right hand and knot the other three to it; make a Solomon's knot as in the first diamond, and work the lower half of the diamond as directed above, only remembering to knot only three threals on to the lower right hand leader instead of seven. Put on another leader, and knot the eight threads on. Repent till you have a row six diamonds wide.

Having knotted all the threads on to the leader,
make two rows of diamonds with a Solomon's knot in the centre of each. For the next row take the top leader of the second diamond, which will be the fifth thread, comnting from the left. Use this for new leader, holding it in your left hand, and knot the four right hand threads of the first diamond on to it; then take the top thread on at the left sule, hold it in the right hand and knot the three threals from the left side of the second dramond on to it. Finish this diamond as you did those in the last row. Repeat until you have five diamonds; make four under these in the same was; three under the fomr, and so on till you have but one oval. Cut the fringe even.

If fringe is not wanterl, the scollop can be finished off with a thick edge in the following manner: Bend each working thread to the right and knot the succeeding threads over them; cat two ends off after every second buttonhole stitch so as gradually to absorl the whole.

When working insertion, it is necessary that the lower edge should resemble the upper. This is managed in the following way:

Keep the last leader pimed on at both ends; take two threads, draw the second mp under the line in a loop, pass the end of both threads throngh this loop, draw them up tight, to form a knot, the same as the one at the top line. The threarls will now be in front, betwren the two last lines. Pass these thereads to the back, one at each side of the knot, tie them firmly together at the back; sew the ends neatly to the work, on the wrong side with a needle and thread.
The beanty of Macramé lace, tepends chiefly on taking care, first to keep the leaders perfectly straight; secondly, to work each knot of the same tightness,
and thirdly, to draw each knot close up to the last. Almost all the patterus given may, be worked from the illustrations; one or two, however, call for a few words of explamation.

As has been said, the Macramé cord ean now be obtained in different colors. In some of the patterns, dark and light lines suggest the combination of different colors, but they can be as easily worked in one shade. In Fig. 8:t, tufts of crewel are introduced. The mamer of fastening them is clearly shown in the illustration.

The way in which the strands of Solomon's knots


Fig. 8.5.
are crossed is shown in Fig. 85, while the manner of fastemng in the tufts of crewel is illustrated in Fig. 86, and the making of the picot in Fig. 87.

Fig. 88, is worked in purse twist of two colors. The manner of working the "groppo knots," or rib balls and picots is shown in Figs. 88a, b, e, and d.
The square used on the bag in Fig. 89, is worked from the main part of this design, a narrow gimp


Fig. 86.


Fig. 87.

## AND HOW TO USE THEM.

or quilling of ribbon being used to conceal the edges of


Fig. 88.
the Macramé. In the fringe, the working threads of
every alternate figure are tied tightly and sewed neatly down at the back.


Fig. 90, shows how to work a corner in Macramé. The illustration is one end of a military collar worked in coarse linen threat. Fig. 91 shows how to arrange the leading threads. The threads from the side and corner picots are gradmally worked in and ent off after being knotted on to the inside perjendienlar leader, as also the left hand working thread of the lower diamond shaperl figure.

Fig. 92, is a guard for a pair of scissors. It is orma-
mented with pompons of worsted. Bands to hold


F1g. 90.
back curtains can be worked in the same way.


Fig. 91.


Fig. 92.

Fig. 93 needs no explanation. It is pretty for knot-


Fig. 93.
ting the ends of buffet scarfs, etc.

## CROCHET.

There are very few people who do not understand how to work simple patterns in crochet. The stitch itself is so extreme! simple and so well known that a description seems superfluous, but many variations exist, which I will name and describe before proceeding to give any patterus.

Chain Stiteh. Make a slip-knot, pass it orer the hook, put the thread over the hook, and by a slight movement of the hands, draw the thread that is over the hook through the slip-loop. Draw the thread again throngh the stitch thas made, and proceed till the chain is of the required length.

Using this chain as a fombation, single crochet is worked thus: put the needle through a fommation stiteh, draw the thread throngh the stitel worked into, and the stitch on the needle, together.
Double crochet: put the needle hook through a foundation stitel, twist the thread over the needle, draw throngh the foundation, then draw fhrough both loops in the needle together.

Half treble: turn the thread over the nedle, pass the neenle throngh a fombation stitch, draw through, turn the thread again orer the needle, and draw through all three loops on the needle together.

Treble: put the thread once over the needle, insert the needle into a foundation stitch, draw a loop through; yon will then have three on the needle, turn the thread again over the needle, draw throngh two loops, turn the thread again over the needle, and draw throngh the two next loops together.

Donble treble: put the thread twice over the needle, insert the needle into the foundation, turn the thread over the needle, draw throngh two loops, put the thread over the needle again, draw through two loops, put the thread over the needle a third time, and draw through the two last loops on the needle.

Cross treble (Fig. 94): Turn the thread twice round the needle, insert the needle into a stitch, turn the thread over the needle, draw throngh the stitch, turn the thread over the needle, draw throngh two loops together; turn the thread over the needle, pass over two stitches, insert the needle into the third stitch, draw through, turn the thread over the needle, draw through two loops, pass the thread over the needle, draw throngh two loops,


Fig. 94.
turn the thread over the needle, draw throngh all the loops on the needle together, two chain, one treble into centre of cross treble. Repeat from beginning.

## AFGHAN STITCH OR TRICOT.

Make a foundation chain, the leugth requirer, allowing one chain over for the forward row. In this stiteh, a row consists of working up and off the loops.

Insert the needle into the second stitch of chain, draw up a loop, keep it on the needle, and continue to draw up a loop through each of the following chain stitches. In working off, put the thread over the needle, draw through the last loop, * put the thread again over the needle, and draw through two loops on the needle together. Repeat from * to the end of the row,

In the second and following rows, work up the loops through the front perpendicular loop of each stitch of previous row, commeneing with second perpendicular loop. The last loop of a tricot row appears to lie somewhat at the back of the work. Care must be taken to work it, or a straight edge cannot be obtained.

BASKEI PATTERN TRICOT.


Fig. 95.
Make a chain of the length required.
1st row: Work up a loop through the first stiteh, work one chan through the loop, repeat until all the loops are worked up. In working off, work through a loop. Slip each alternate loop off the hook, work three chain between the loops worked through.

2d row: Pass the slipped-off loop at the back of the chain; draw up a loop through it, then work one chain through the loop, draw up a loop through the next loop, and under the chain, work one chain through the loop. Repeat from the beginning of the row until all the loops are worked up; the loops are worked off as described for the first rom.
The second row is repeated throughout. Remember that in afghan stiteh, or tricot, working up and off, is reckoned as one row.

## TUF' STITCH.



Fig. 96.
1st row: One double into each foundation stiteh.
2nd row: * One doulde into a stitch: draw up a loop through the next stitch, draw the right side of the loop with the finger amt thumb of the left hand, over the left side of the loop (see arrow), insert the hook into the loop thus held by the finger, draw up a loop, turn the thread over the hook, draw up another loop, draw through fire loops on the hook together, work up a loop through the last stitch worked into, draw through both loops on the hook together. Repeat from *

These two rows are repeated throughout, arranging the tuft stitches so that they lie between each other in alteruate rows; this is done by commencing one pattern row with the double, and the other with a tuft stitch.

## MUSCOVITE TRICOT.



Fig. 97
1st row: Work up the loops as for ordinary tricot, work off the first loop, * three chain, work off the two next loops. Repeat from*

2ud row: Work up the loops like last row, * three chain, work off two loops. Repeat from * to the end of the row. These two rows are repeated alternately.
carriage mat with foot warmers in muscovite tricot.
It will be found convenient in working this mat, to cut a paper pattern of the exact size wanterl, on which the work may be measured from time to time, to see that the centre and border are duly proportioned. It is also much easier to work the centre and border separately.
Mark upon the paper the size you wish the centre to be, and make a chain a little longer to allow for taking up in working; with the dark olive wool work in Museovite tricot.
Cut patterns also of the foot muffs fitting the crochet to them. The border is also in Muscorite tricot, worked with the light olive wool; it must be shaped at the corners by working three stitches into one in each row; it is joined to the centre by a needle and wool. The foot-warmers are worked with the darkest shade, and are lined throughout with looped knitting

For the looped knitting, cast on as many stitches as are required for the top of foot-warmers with red wool.

1st row: Knit.
2nd row: Knit one, take a ball of the darkest olive wool and pass the end between the first and second


Fig. 98.
stitches, knit the second stitch, pass the wool back, leaving a loop of about one and a half inch. Repeat from the beginning of the row.

Each alternate row is kuitted plain; this makes the loops of wool on the same side each time. Work the looped knitting to the shape of foot-warmer, and also to fit the bottom of mat over which the foot-warmer is sewn; the necessary decrease must be made by knitting two stitches together at the end of the row. A band of looped knitting, abont eight stitches in width, is sewn across the top of the foot-warmers.

For the crochet edge:-
1st row: Work with dark olive one double into a stitch at the edge of border. Pass over one stitch, one double, one half treble, one treble, one half treble, and one double into next stitch, pass over one stitch, and repeat from the begiming of the row.

2nd row (with red wool): One donble into the first double of last row, one single into each stitch of scallop. Repeat.

Directions for making the balls will be fomd on page 214. They are of red wool and are sewn to the border by a needle and wool. The card for balls should be cut to the size of a fiftr-cent piece. The rug must be lined witl red baize to the edge of the border of point Muscorite.

## CROCHET FRINGE.

This pretty fringe is suitable for ornamenting wood baskets, waste-paper baskets, etc.; it is worked with fine olive cord and dark crimson Berlin wool.

To commence, make a chain the length required with a crochet hook, No. 8 (Walker's bell gange), and the cord.

1st row: One double into a stitch, three chain, pass over three stitches and repeat.

2nd row: One double into first of three chain, eight chain, one double into last of next three chain. Repeat from the beginning of the row.

For the heading: Work one double into a stitch, three chain, pass over two stitches, and repeat from the begimning of the row.

The tassels are made by turning wool eighteen times


Fig. 99.
over a card measuring two inches in breadth; cut the wool at one end, tie tightly around the other about half an-inch from the top; they are sewn to the scallop of crochet with a needle and wool. The method of working the stitches with wool in each scallop is clearly shown in the illustration. A length of cord is knotted in the depth betreen two scollops.

To make the little fluffy balls so much used in connection with crochet in wools, cut two circular pieces of card board, regulating the size by the size it is desired to have the balls. For ordinary use, a fifty cent piece would be a good guide. Cut a hole in the centre, and with a neerlle and wool sew evenly orer both cards until the central hole is quite filled up. Cut the wool between the cards with a sharp penkife or scissors, and tie the wool tightly in the centre between the cards. hemove the cards, rub the ball in the hand, stem it over boiling water, and trim the edges with a pair of scissors.
Good parlor halls for children can be made with single or clonble Zepher wool of all eolors over cards measuring four inches in diameter, with a hole in the centre one and a half inches in diameter, tied strongly between the dises with fine twine. Fig. 100 shows the ball before the disus are remored.


Fig. 100.
BEADED TRICOT.
Make at chain of the required length, and work one row of plain afghan stitch. Then in the next row, * work up stitch; work up second stitch and make three chain; put the needle through the same stitch the chain started from, throw the wool round the needle and pull it through last two stitches, repeat from * to the end of row, working off the stitches as usual.
In the next row reverse the order of the beads.

Geometrical figures can be worked by means of these beads on a gromed of plain tricot. It is a useful stiteh for quilts, children's afghans, ete.
Another way of ornamenting a plain gromad of close crochet, whether trieot or plain donble crochet, is an imitation of tatting, and is worked as follows.

Work three chain, then make a loop over left forefinger in such a way that the end connected with the spool or ball will be in front; insert needle over the front and under the back threarl, draw up the thread on the needle as a knot; change the arrangement of the loop on the left hand, so that the ball end of the threal will be at the back; pass the hook under the back thread (which will be the first counting from the needle), and orer the front or second thread; draw up as a knot. A little difficulty may be experienced at first in making these knots lie smoothly, but practice will render it easy. Work nine donble knots, then put the thread romed the needle and draw through all the knots; put the thread romd the needle, and draw throngh the last stitch on the needle. This forms an eyelet like those made with a tatting shattle. In usiug this stitch in connection with tricot, three worked up stitches take the place of the three chain stitches which are worked between the "tatting" loops.

## STAR STITCH.

Make a chain the length required, draw up a loop through each of five successive stitches, draw through all the loops on the needle, close the eluster with one chain, * draw up a loop moder the last chain, another throngh back perpendicular of last stitch, and one throngh each of the two next stitches, draw through all the loops on the hook together, close with one chain. Repeat from * to the required size. For the edge in the illustration:

1st row: One donble into erery stitch.

2nd row: One double into a stitch, * pass over tro stitches, eight trebles under next stitch. Repeat from *


Fig. 101.

TO JOIN AFGIIAN STRIPES OF TWO COLORS.
The ends of the two colored wools should be joined, and then a chain of three be made on one, and this crocheted into the first two stitches of the held together stripes; then a chain of three mate on the other wool and crocheted into the next two stitches, alteruating the colors through the length of the stripes. In case of a Roman stripe two colors contrasting harmoniously with all the colors used in the stripes should be taken. Black and yellow are generally useful for such stripes.

## Pfiticoat for child of one year old.



Fig. 102.

Materials required, six ounces white and one ounce scarlet Berlin wool (crochet-hooks Nos. 10 and 12). The waist and skirt are worked separatels. It is best worked to a paper pattern. With the white wool and hook No. 12 begin tho bodice on the button side of the back. For a child of the age mentioned a chain of about thirty-six inches will be required. Work as follows: one treble into the back horizontal stitch of each loop; increase by working twice into each stitch at the bottom of every other row to make the slope at the bottom of the waist. To shape the armhole pass over tro stitches at the commencement of one row, and at the end of the next row until you have worked to the centre of armhole, then increase in the same proportion that you decreased. Work straight across the front without increase or
decrease; the other armhole and back are worked in the same way as described for the first side.

For the skirt, work with the same hook:
1st row: One donble into each stitch at the edge of waist; join romed.
2ul row: One double into each of three stitches; two chain, repeat.

3rd row: One donble into each stitch, three donbles into each chain stitch. Repeat.

4th row: One donble into each stitch at right side of the scallop, three donbles into the centre stitch, and one double into each stiteh at the other side of the scollop. This last row is to le repeated nine times more; then with hook No. 10 nine rows more, three of these in scarlet, aud two with white; this fimishes the skirt.

For the trimming at the top of the waist, work one donble into a stitch at the edge, five chain, one treble into the fi:st, pass over three stitches and repeat. When worked, the treble between the chains should be parallel with the top of the waist.

2nd row: One single with searlet wool into each stitch of the last row. This is for the edge that turns down.

For the stand up edge:-
1strow: Work one treble into stitch at the edge of waist, five chain, one treble into the first chain stitch (this forms the bottom of the scollop), pass over three stitches, two trebles into the next two stitches, five chain, one treble into the first, pass over three, and repeat.
2nd row: One double into each stitch of last end with scarlet wool. Run ribbon in and out through the trebles and tie in a bow. The same edging is worked round the armholes.

## SHAWL IN CROCHET.

Make a very loose chain as long as you want jour shawl square, say nearly two yards long. Turn and
make three trebles in the seventh loop of chain. * Then skip four chain, and make one donble crochet in fifth chain, then make three chain, then three trebles in same chain that you made one double crochet in. Then skip four chain, and make one double crochet in fifth chain and repeat from * to the end of the row. After making three trebles in last chain you turn and make three chain; then make one * domble chain in the last three chain of the previous row; make three chain, then make three treble in the same place you made the last double crochet. Make one double crochet in the next three chain, and repeat from * . Make a border of shell stitch after the shawl is square. Use a very coarse ivory needle for the shawl.

## INFANT'S SACQUE IN SHELL STITCH.

Make a chain of one luudred stitches for a foundation.
1st row: Crochet across a row of open trebles, $i$. e, one chain between each and skipping one stitch in the foundation, fifty trebles in all.

2ud row: Turn the work and crochet back making a shell of two trebles each, between each treble of first row, forty-eight shells.

3rd row: Widen for the shonlders by crocheting three trebles in the elerentin and twelfth shells from each edge.

4th row: Plain, except to make two shells in each place where it was widened in the preceding row.

Continue wiflening every other row on the shonlders until fou have widened fire times, being careful to widen directly under the shell where you widened first.

8th row: Widen in the two shells in the centre of the back in the same way as jou did for the shoulders. In widening the back widen always in the two centre stitches (not as on the shomlders).

12th row: Crochet eleven shells, then back to the first side, dropping all the shells between the widening shells for a shoulder gore-skip ten shells for part of the arm.
hole. Crochet two rows on the back the same way (there shonld be thirty shells for the back and eleven shells on each front); join uuder the armhole with four chain stitches and work three shells into these chains in the 14th row.

Crochet eleven rows across, widening every third row in the centre of the back and finish with a border of shells all aromnd it. The shells in the border are of three trebles into every other shell and a double crochet into the sliell between. The neek has an extra row of shells before the border row. For the sleeve, commence under the arm and crochet twelve rows of shells into the armhole and fiuish with the border.

This is pretty made in two colors, using one for the body and the other for a border in this way:

20th row: Join the border color and erochet two rows, then one row of the body color, then two rows of the border color all around the ealge of the sacque, and then finish with the shells of three trebles.

Run a cord with tassels or a ribbou throngh the holes at the neck, and you will have a neat saeque very rapidly and easily made.

Materials required-abont three onnces of Saxony yarn-two of one color, one of the other.

## CROCHETED GLOVES.

Four ounces of German fingering, with steel hook No. 12 (about equal in size to a No. 16 knitting-needle as sold in the stores) will make a full-sized, warm and comfortable gentleman's over-glove. The same quantity of Andalnsian or Saxons, and a hook three or fomr sizes smaller, will make a lady's size glove.

Make a chain of seventy-three stitches, work seventytivo DC (double crochet) on it, unite into a ring and work six rounds of DC.

8th round: Five DC, one DC between the next two stitulies to increase for the thumb, sixty-seren DC.

In every successive round increase one on each side this one stitch for the thmmb, until jou have thinty extra stitches. Then finish the thumb as follows:

A DC on each of these thirty stitches, then eighteen chain and join to the first DC of the thirty. On the next round work forty-eight DC. In every round after this, miss the first and last of the eightecn extra DC; this forms a gusset. Wheu the stitches have been reduced to the original thirty, work fifteen rounds plain-that is in DC, without any deereasing's. From this point of the thumb work three DC, miss the next, and repeat this round and round till ouly four stitches are left. Finish the thumb by working these four stitches at once, and fasten off on the side.

Now return to the hand. In addition to the original seventy-two stitches, there were eighteen added for the thumb gusset. Ou these ninety stitches work sixteen rounds of DC, and then divide them for the fingers, fifty stitches for the back of the hand and forty for the front.
For the first finger work twelse DC from the back, eleven from the front, make ten chain, and join to the first DC. On the next round work thirty-three DC, and in succeeding rounds miss the first and last of the extral ten chain until ouly twenty-three at left. On these twenty-three stitches wrork tirenty rounds plain DC-or till the finger is long enough. Then decrease and fiuish off as directed for the thimb.

For the second finger take twelve from the back, ten from the front, add a chain of ten as before, and use the ten chain of the forefinger gusset for the other side of the finger-forty-two stithes in all, with a gusset of ten chain on each side of the finger. Decrease on each of these ten chain as directed for the first finger, till twenty.
two stitches are left, then work twenty-three rounds plain, and taper and finish off as before.

Work the third finger the same as the second, but work twenty plain rounds only-not twenty-three rounds. The remaining twenty-three stitches are for the last finger which only has a gusset on the side next to the precerling finger. Decrease on this gusset till only tirenty-two stitches are left, work eighteen romds plain, and then finish off as before.

The second glove is made in the same manner, care being taken to make them right and left by reversing the stitches for front and back.

## THE CUFF.

Hold the work with the right side outside, begin where the chain is joined, and work a row of looped erochet. Break off at the end. Do ten more rows. On the 11th row increase at each end, also in the 15 th, 19 th, 24 th and 29 th rows. Work thirty three rows in all and finish. Sew in neatly all the ends; sew on a piece of strong. leather, and insert a spring.

The backs of the glores can be embroidered in any simple stitch.

CROCHET COLLAR AND CUFF.


Fig. 103.

This is to be worked in fine linen thread with a steel weedle. It is rery pretty for an edging and can be crocheted as narrow or as deep as desired. The extra width shown in the illustration is not needed for the cuff; about three inches of it is worked to turn the corner for the collar, which should be made up like the knitted one given in the next chapter.

For the cuff make a chain of forty-four stitches.
1st row: Pass over six stitches, one treble into the seventh, two chain, pass over one stitch, * one donble into the next, two chain, pass over two stitches, two trebles separated by three chain into the next, two chain, pass over two stitches, one double into the next, repeat from * five times more, * two chain, pass over two stitches, one treble into the next, three chain, one treble into the same stitch; turn.
2nd row: Three chain, one treble under three chain of last row, * five chain, two trebles separated by two chain under next three chain, repeat from * five times more; turn.
3rd row: Four chain,* two trebles separated by three chain under two chain, two chain, one donble into centre of five chain, two chain, repeat from * five times more, two trebles separated by two chain under two chain; turn.

4th row: Three chain, one treble under two chain, * five chain, two trebles separated by two chain under three chain, repeat from * five times more, one chain, thirteen trebles under four chain, one double into first row of pattern (see design); turn.

5th row: Fourteen trebles each separated by oue chain between the trebles of last row and under the one chain, one chain, * two trebles separated by two chain under two chain, two chain, one double into centre of five chain, two chain, repeat from * five times more, two
chain, two trebles separated by two chain under the chain at the turn of last row; turn.
6th row: Three chain, one treble under two ehain, * five chain, two trebles separated by five chain under two chain, repeat from * five times more, two chain, fourteen trebles, each separated by one chain between the trebles of last row; turn.
7th row: Two chain, fourteen lalf trebles each separated by two chain between the trebles of last row, three chain, * two trebles separated by three chain under two chain, two chain, one double into centre of five ehain, two chain, repeat from * five times more, two chain, two trebles under the chain at the turn of last row. Repeat from second row for the length required.

For the edge, work one-half treble under the two chain at the turn of the last row, one-half treble under the fourth two chain on next seollop, * three ehain, one-half treble under next two chain, repeat from * eight times more, three chain, theu repeat from the beginning of the row.
For the narrow part used for the corner of collar, work the four repeats of the first patterus of the first and second rows alternately.

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NARROW EDGING.
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Fig. 104.
This edging is worked in the width, a heading being crocheted on afterwards.

Make a chain of nine stitehes, join in a round, make two chain, three trebles into the ring, keen the top loop, of each on the hook, and draw throagh altogether; six chain, one single into the first, three trebles into the
foundation ring, keep the top loop of each on the hook, and draw through altogether; two chain, one single into the foundation loop. Repeat.

For the heading: Two trebles under the chain of nine, four chain. Repeat from begiming of row.

Fig. 105 is an elging of feather edge or mignardise


Fig. 105.
braid and crochet. Care shonld be taken in choosing the braid, which shonld be fine and firm. No. 0 is a very good number. I have found that this kind of crochet washes mach better when worked rather loosely, although it is not quite so handsome at first as when crocheted together.

Begin with the leaf line; work one donble into a mignardise picot; eight chain; fasten to third picot of mignardise; work back on the eight chain; one double, five treble, and one donble. This finishes one leaf. Three chain, six chain, fasten to second picot, one double, four treble, and one double for this leaf. Three chain, five chain, fasten to second picot; work one double, three treble, and one donble. Nine chain, one double into third picot; * one treble into following picot, seven chain, one single nito picot last treble was worked into. Repeat from * twice more, then work as before lescribed, bnt in reversed order; then repeat again from the beginning.

For the other side, one chain, two double into two following picots (see design), eight chain, twist the cotton three times round the hook, one double into picot (see design), twist the cotton twice round the hook, one double into next picot; again twist the cotton twice round the hook, one treble passing over one picot, twist the cotton three times round the hook, three treble (see design). The loops on the hook must now be worked off, and the treble and donble stitches worked opposite to those already worked; finish vith a row of alternately one chain and one treble.

D'OYLEY: WAVED BRAID AND CROCHET.


Begin the work between the slanting line of braid and the lower left-laud point of the outer circle (see Fig. 107).

Connt the points of braid and place them as shown in No. 107. Work one double in the seventh and eighth points together, two chain. Join these two pieces of brail together by working one double into each of the four points on both sides together (see design). Fasten off.

* Now work one double into the second point from the top of left-hand sile of braid, two ehain, one double into next point, one chain, one lomble into next point, one chain, one treble into each of the three next successive points of the braid, one chain, one double into each of the three next points of the braid, join to the first donble of this imer side of point, and fasten off (with a needle, to secure the cotton and make the work neat). Between the small points, which come alternately, join with a needle and cotton, working with it two chain between the points. Repeat from * mutil you have eight complete points (see No. 107).

For the inside of the pattern work one donble into the first inner left-hand point of braid, six chain, one double into the next imer point, twelve chain, one donble into next point, six chain, one treble into each of three next inner points, six chain, one donble into the next point, six chain, one single into the centre of twelve chain, six chain, one double into the next point, four chain, one single into the second of first six chain, two chain, one donble into the lower point. This completes the inner part; fasten off.

The braid is carried across to begin the next onter pattern in the same place as the last.

Leave eight clear points on the lower side of the braid, and begin the next circle. (Ten circles are needed for the d'oyley).

After working between the first two lines of braid for the next circle, work on the outer side of the points of braid left between the tro circles, two chain, one
treble into each of the five points. The dunble-trebles and chain-stitches between the circles will be moro easy to work from the design than from description when all the ten outer circles are worked and joined.


Fig. 107.
For the border, work one treble into first outer point of circle (see right-hand side of Fig. 107), three chain, one single into next point, eight chain, one single in the fourth, three chain, ono single into next
point, six chain, one single into fourth, two chain, one single into next point, * eight chain, one siugle into the fourth, three chain, oue single into next point of braid. Repeat from * twice more. Six chain, one single into fourth, two chain, one single into next point. Repeat between the two last **. Six chain, one single into the fourth, two chain, one single into the next point, eight chain, one single in the fourth, three chain, one single in the next point fire chain, one treble into next point, seven chain. Repeat from the beginning of the edge.

For the middle of d'oyley, join the braid neatly with a needle and cotton to the piece of braid the first circle was begun with. Comnt the points of braid in No. 107, and arrange them as shown in the cut. The straight inner lines of braid lying together ane sewn to the two middle points of the braid, which comnect the circles. The inner lines are worked with two chain, one double into the two points lying together. Repeat nine times more; this finishes the straight centre lines.
The chain-stitches in the centre of each division can be easily worked from the design.

For the middle star, five chain, join romd.
1st Romd: Two chain, one treble; repeat four times more.

2nd Ronnd: Five chain, one donble under the two chain, fire chain, one double under the same; repeat all round.
3rd Round: Seven chain, one double under the five chaîn.

4th Round: Five chain; one double in the centre of five chain. Join to the centre point of braid; five chain, one double in the centre of next five chain; join to the next centre point of braid. Repeat all round.

The bag illustrated in Fig. 108, is made of plush or satin, aud decorated with crochet worked in single strips


Fig. 108.
as in Fig. 109. This pattern is worked in strips on a fommation of single chain the lemgth of the bag, amb sewn or crocheted together at the points. These


Fig. 109.
strips are in turn semed to a foundation of donble
crochet the length of the bag. The bag from which this pattern was taken was of olive green plush lined with satin of the same color, the crochet was worked in gold sjangled thread, and the balls were of Hamburgh work in two shades of olive green, but the effect of the crochet would be rery good if done in very fine seine twine, or coarse écrn linen thread. A very pretty tidy could be made of fine seine twine crocheted after this pattern and arranged as in the bag, colored ribbon being run through the open work. The ends should be finished with a tied in fringe.

## HAIRPIN WORK OR CROCHET GIMP.

This is worked over a fork shaped like a large


Fig. 110.
hairpin. It should be made of stont wire, copper being preferable. For marrow work, one of the pins used for crimping the hair would do, but for some patterns it is desirable to have a wider fork. The gimp is rery useful for making various handsome edgings being crocheted iuto different patterns after the manner of miguardise braid. Pretty breakfast caps can be made of lengths worked from the following pattern and sewed together, one length being sewerd around as a border. Make a slip-loop; pass it over one
side of the fork, bringing the knot in the middle of the fork, turn the fork round, and sou will have a loop on each side. Draw up a stitch through the first loop, make one chain, * take out the hook, turn the pin and insert the hook in the stiteh from which it was withdrawn, work one double under left-hand loop. Repeat from *

BAG FOR SOILED LACES IN HAIRPIN - WORK AND
CROCHET.
This bag is composed of lengths of hairpin-work of fawn-colored cotton, joined with crochet chain worked in scarlet. For the harpin-work, commence by making a loop, in the cotton, pass it over one side of the fork, turn the tork, the cotton will form a loop over the other side of the fork, insert the hook in the first loop, (raw up a loop, * work two donbles into the left-hand loop, take ont the look, tworn the fork from left to right, Giaw up, a loop through the stitch from which you withrrew the hook, then repeat foom *. Make fomteen lengths of hampm-work, twelve inches in length, with fawn cotton. Then work a length of filteen inches to form the border; join the fourteen lengths by working with scarlet cotton one double into two loops of hairpm-work, three chain; take another length, * one double into six loops together, three chain, one double into six loops of first length, repeat from *, working from side to side the length of the work; all the lengths are joined in the same way. For the bottom a circle of fifteen inches in circumference is neerled; this is made by joining seven graduated lengths of hairpinwork together. The centre length measures five and a half inches, the lengths on each side being gradually narrower; this is joined by a needle and thread to the npper part of bag.

For the trimming covering the join, see Fig. 111.
Work one donble into six loops, three chain, one double into the end of a length of hairpin-work, three chain, one donble into next six loops together, three chain, one double into the double worked into two loops, three chain. Repeat from the beginning of the row.


Fig. 111.
For the edge: Work one double into six loops together, six chain, one single into the third, three chain. Repeat. A wire is run through the top of trimming (see design), to keep the bag in a round form. The top of bag is drawn together by running strings of ribbon.

EDGING OF HAIRPIN-WORK AND CROCHET.
Make a piece of hairpin- rork about the length required for the edging.

For the edge of the trimming: One single into a loop of hairpin-work, three chain, one single into the first chain, one chain, one single into each of fifteen loops of hairpin-work, three chain, one single into first picot, one
chain, one single into second of three chain, one chain, * one donble into a loop, hairpin-work, five chain, one double into second chain, one chain, repeat from * six times more, then repeat from begimning of the row.

For the heading:-
1st row: One chain, one smgle, separated by one chan into each of three loops of hairpin-work in the depth ot a scallop, one single into each of nine loops, one single separated by one chain into each of three next loops, one chain, one single into first chain; fasten the cotton off secmrely, and work the same in the (lepth of each scallop). A reference to the illustration while working this will make the directions quite plain.

2nd row: One triple treble muler the chain in the depth of the scallop, three chain, one double treble throngh the next two loops of hairpin together, three chain, one treble throngh two next loops together, three chain, one rlouble treble throngh two next loops together three chain. Repeat from beginning of row.

3rd row: One treble separated by one chain into each alternate stiteh of last row.
BORDER IN HAIRPIN-WORK AND CROCHET FOR SIIETLAND OR EIS WOOL SHAWL.


Fig. 112.
A fork tro inches across is required for the hairpinwork, and in making it, two double are crocheted instead of one donble between each turning of the fork.

When you have made the length required (using Shetland or Eis Wool), work as follows:

1st row: One double through twenty-two loops of hair-pin-work together, crossing as in illustration by taking the second eleven loops on the needle before the first eleven, seven chain, one single into centre of hairpinwork (see desigu), seveu chain. Repeat from beginning of row.

2nd row: Draw up three loops through donble of last row, leave the loops standing out, work one donble into the same stitch, two chain, pass over two stitches, one single into the next, five chain, one single into the double of last row, five chain. Repeat from the beginning of last row.

3rd row: One double into the three loops that were left standing up of last row, three chain, one single into each of the three next successive stitches, draw up three loops through the next.

4th row: One single into the second of three chain of last row, four chain, one domble into the next three loops together, four chaiu, one siugle into second of three chain, five chain, pass over four stitches, and repeat from the beginning of the row.

5th row: One single into the third of fom chain of last row, two chain, take mother length of hairpin-work and work one single into a centre stitch, then one single into the double of last row, two chain, pass over one stitch, one single into the next, three chain, one domble into twenty-two loops of hairpin-work together, cross the loops as in the first row, three chain. Repeat from the beginining of the row.

For the heading: Work a row like the first on the other side of hairpin-work, then work one double into double worked in the loops of hairpin-work, ten chain, and repeat.

For the edge:-

1st row: Like the first row worked on the other side.
2ud row: Draw up three loops through the double worked into the hairpin-loops, six chain, one double into next double, six chain. Repeat from the beginning of the row.

3rd row: Draw up three loops through the first of six chain, six chain, one double into next double, six chain, draw up three loops through the last of six chain, one single into three loops. Repeat from the beginuing of the row.

4th row: One single through the first three loops together, and draw up three loops through the same loops, five chain, one donble into next donble, five chain, work up three loops through next three loops together, two chain, work up three loops through the last chain, one chain. Repeat from the beginning of the row.

5th row: Work up three loops through the first three loops of last row, four chain, one donble into next double, four chain, work up three loops through the next three loops together, one chain, work up three loops throngh this stiteh, one single throngh the next three loops together, one chain, work up three loops through this chain, and repeat from the beginning of the row.

6th row: Work up three loops through first three loops together, six chain, one double into next donble, five chain, one single into first of six chain, five chain, one double into the same stitch last donble was worked into, five chain, work up three loops through next three loops together, one chain, work up three loops throngh the ehain, work up three loops through the next three loops together, one chain, work up three loops through the ehain, work up three loops through the next three loops together, one chain, work up three loops through the chain. Repeat from the beginning of the row.

7 th row: One single into the first of five chain of last row, one single through the three loops together, three
chain, one single through the same three loops, repeat from * fire times more, then repeat from the beginning of the row.

Figure 113 shows a rery pretty way of trimming a


Fig. 113.
wicker work basket with hairpin-work and tassels. The basket has a full lining of silk. It is easier to line the sides first, serring the upper edge of the lining on and turuing it orer so as to conceal the seam. Then cut a piece of stiff paper or cardboard exactly fitting into the hottom of the basket, cover it with the silk used for lining the basket, and either fasten it in place by means of a little gum or glue, or catch it down with a few stitches.

In the pattern basket, the hairpin-work (Figure I14)


Fig. 114.
was done with Berlin wool and gold thread while the tassels were of silk. The hairpin-work is made in two widths, and sewed together. In the widest, three donble are crocheted between each turn of the fork. The tassels are made by winding silk or wool round a card of the requisite width. After a sufficient quantity is wound, take a worsted needle threaded with the wool, donbled, pass through the upper edge, and tie tightly (having. removed the eard), tie again a short distance from the top. Cut the lower edge or not as you fancy. Some comb the tassels which makes them soft and flutil? ; when this is done they shomb be made rather extrat large as the combing reduces the size.
Another variety of crochet gimp is worked over a wooden fork, having one side much wider than the other.
It can be eaily whittled from soft wood and sandpapered until perfectly smootl. To make the fringe shown in Figure 115 make a loop of wool, pass it over the narrow side of the fork, turn the fork, and you will lave a loop over the wide side; draw up a stiteh through the first loop on the hook, turn the fork, draw up a stiteh theongh the naryom loop, draw through hoth loups on
the hook together. Repeat from * for the length required.


Fig. 115.
For the crochet heading, which is worked with a lighter color of wool:

1st row: One double into of the wide loops of the fork, work together, turning the loops as shown in Fig. 115, two chain. Repeat.
2nd row: One donble under two chain, three chain. Repeat.

For the edge: Work one donble into two of the small loops (see cut), five chain, repeat. Strands of wool, about one and a half inches deep, are knotted into the loop of five chain to form tassels; a little ball of the lightest shade of wool is sewn under the heading at equal distances.

This fringe could be made deeper by fastening tro or more rows of the hairpin-work together, before crocheting the heading and edge. The loops of each should be
twisted as in the desigu in this case. This wonld form a suitable trimming for such a small roumd table as is shown in Figure 139, page 303. The top of the table can be covered with plush or felt.

Figure 116 shows a basket work stand with trimming


Fig. 116.
made of fork work after design in Figure 117, the wide loops being canght together at regular intervals with woolen balls. The same trimming can be used on various shaped baskets. Used as an edging for a band of embroidered felt it would be very pretty for a trash basket.

It could also be userl as an edging for a table or mautel drapery.

rig. 117.

## EDGING IN HAIRPIN-WORK AND CROCHET.



Pig. 118.
Make the length required in ordinary haippin-work. Then work

One donble in a loop of hairpin-work, three chain, one donble in the next, two chain, one donble in the next, one chain, put the hook through eight loops of hairpin-work, pull through with one single, one chain, one double in the next loop of hairpin-work, two chain, one donble in the next loop; turn, four chain, one donble in the first of the first two chain, turn and work five
donble under the four chain, one double into the next loop of hairpin-work, three chain, one double into the next loop. Repeat.
For the edge round the scallop begin in the deep part of scallop. Work two loops together four times in succession with one double, taking four loops from one side and four from the other, separated by three chain, one double into six successive loops, three chain. Repeat from beginning of row.

## ANOTHER EDGING.

Make the length required in hairpin-work.
1st row: * One double in three successive loops of hairpin-work with one chain between, twelve chain, one single throngh nine successive loops of hairpin-work, two chain, one single in the ninth of twelve chain, two chain, one single in the sixth of twelve chain, five chain; repeat from *.

2nd row: One treble in the first double of last row, two chain, pass over two, one treble in the next.

For the edge, begin in the depth of the scallop, * one double in four successive loops of hairpin-work, five picots (of five chain, one double in the fourth) with one double after each picot in five successive loops of hair-pin-work, three double in three successive loops of hair-pin-work; repeat from *.

## CROCHET EDGING.

This edging is very pretty for trimming underclothing when fine crochet cotton is used, and in seine twine will make a good elge for draping a mantle or bracket. A very serviceable tidy can be made from this pattern also by repeating the shells and open work (omitting the scallops), until the required width is worked. When the tidy is long enongh, cast off, tie fringe of the corl
into the bottom and run satin ribbon through the open work stripes. The edging is worked as follows:


FIg. 119.
1st row: Nineteen chain stitches.
2nd row: Three double stitches on eleventh chain, two chain, three double on next stitch, three chain, one single chain on the fourth following stitch, three chain, three donble chain on the fourth following, two ehain, three double chain on the next stitch.

3rd row: Two chain, six double, the middle two of which are separated by two chain, on the two chain betreen six donble chain on preceding row, three chain, one single crochet on single crochet of preceding row, three chain, six donble, the middle two of which are separated by two chain on the next two chain between six double two chain, one double on middle of next fire chain.

4th row: Five chain, six double, separated by two chain as in preceding row, on the next two chain between six double, seven chain, six double as before on the next two chain between six double chain.

5th row: Three chain, six double as before on the rext two chain of preceding row, three chain, one single crochet on the middle of next seren chain, three chain, six double as before ou the next two chain between six double, two chain, one double on the middle of next five chain.

6 th row: Five chain, six donble as before on the next two chain between six donble, three chain, one single crochet on the mext single crochet, three chain, six
double as before on the next two, one chain, seren double separated each by one chain on the next three chain, one chain, one single on the chain before the next six donble at the beginning of third row.

7th row: Six times alternately five chain, one single crochet on the next chain between two double in the preceding row ; then five chain, one single on the chain before the next six domble, two chain, six double as before on the next two chain, seven chain, six donble as before on the next two clain, two chain, one double on the middle of the next five chain.

Contime the pattern in the manner of the last four rounds, observing, howerer, that the pattern figure of the open work middle strip only comprises three rounds, while the other part of the edging requires four rounds.

It will be an easy matter to make this pattern deeper by repeating the shells and open strip.

## KNITTING.

It is almost impossible so to describe the way in which the knitting stitch is formed as to enable the worker to teach herself, and fortunately it is almost as needless as it is difficult. Everyone has a friend who, in a few minutes will teach the first steps in this fascinating occupation.

There are two wass of knitting, known respectively as German or English knitting. The difference lies merely in the manner of holding the thread. The German is by far the easier, and enables one to knit more quickly and evenly, while, at the same time, it is far less fatiguing than the English method.

To KNit in the german way jou mist hold your yarn or thread as if for crochet, and form the stitch by putting your right hand needle through the first stitch on the needle, eatch up the thread, which is held in place on the left fore finger and draw it through the stitch. In order to seam or purl, put the thread over the needle in the left hand; put the right hand needle back of the thread, and into the stitch from the outside; catch the thread on the right hand needle and draw throngh.

Decreasing is done by knitting two stitches together, or else by slipping a stiteh, that is, taking it off the needle without knitting, and knitting a stitch, and slipping the unknitted stitch over the last knitted one. Sometimes tro stitches are decreased at once, by slip-
ping one, kuitting two together, and slipping the unknitted stitch over the two knit together.

Increasing, or making a stitch is done by throwing the thread once round the needle, and in the next row knitting it as an ordinary stitch.

To knit a round, knit with four needles, cast on-let us say, twenty-two stitches on the first needle, insert a second needle in the last stitch of the first, and cast on twenty stitches; proceed in the same way with a third needle, casting on eighteen only; then knit the two extra stitches on the first needle on to the last-this makes twenty stitches upon each needle, and thus completes the circle.
To cast off, knit two stitches and with the left hand needle slip the first stitch over the second; continne to the end of the row.
Picking up a stitch is done by taking up a thread, and knitting it as a stitch.

The following abbreviations are those generally used in directions for knitting.


A star shows where a repeat of the pattern is begun.
Garter stitch is plain knitting back and forth; many pretty afghans are knit in this way, in long strips, the strips being afterwards crocheted together. A very pretty one can be made of double zephyr wool, four of the strips being an olive green, and three knit in Roman stripes. The stripes are joiued with black and yellow
wool. The plain strips are forty stitches, the Roman ones fifty stitches wide. It is finished at either end by a fringe of the different colors used in the several stripes. For the Roman stripe, begin with * eighteen rows of red, one of white, one of red, one of yellow, one of blue, one of red, one of blue, one of white, eighteen of blue, one of white, one of red, one of yellow, one of blue, one of red, one of blue, one of white, eighteen of black, one of white, one of red, one of yellow, one of blue, one of red, one of white, one of blue, eighteen of white, one of blue, one of white, one of red, one of sellow, one of blue, one of red, one of white, repeat from *.

A very comfortable and substantial shawl is a square knit in garter stitch, and bordered with one of the knit edgings given a little further on. Germantown wool is very nice for this purpose.

Brioche is an extremely pretty and useful stitch. It is very elastic, and looks the same on both sides.

Cast on any even number of stitches, and with two needles work backward and forward as follows:

1st row: Orer (at the edge this is done by simply putting the right hand needle under the wool), slip one, as if about to purl it, knit one. Repeat from the beginning.

2nd row: Over, slip one, as if about to purl, knit two together. Repeat.

Every subsequent row is like the second. In casting off, look upon the domble stitch-the two usually knit together-as one. In narrowing in this pattern, knit together the three stitches-the slipped stitch and the double stitch-which form one rib, and on the next row knit the stitch thus made with the double stitch preceding it.

German brioche is another form of this stitch. In knitting it, cast on any number of stitches in threes. All the rows are kuit thus: Slip one, as if about to purl
over, knit two together. The over or made stitch must always be slipped and the decreased stitch and the slipper stitch of the previous row knitted together.

## SOFA CUSHION.

A pretty sofa cushion or hassock is knit in German Brioche as follows:

Three skeins yellow, two white, three red, three purple, three green, six gray, of double Berlin wool. Needles, No. 5.

Cast on sixty-four stitches with yellow.
Ist row: Wool forward; slip one, knit one.
2nd row: Join the white. The remainder is all brioche stitch; do two rows, then two yellow rows.

Join the gray; knit eighteen brioche (this is really fifty-four stitches), leaving fourteen on the other unknitted. Turn back and knit four brioche; turn again and knit five brioche; turn and knit six. Continue tak. ing three more stitches every time you turn, until fou come to the end of your needles. Then do another yellow and white stripe.

Join the scarlet, and work as before. There have to be eighteen sections altogether, a gray one separating each pright-colored one. Make a round cushion filled with feathers or curled hair, and put the knitting over, sewing it neatly together. Draw in the centre, which may be finished off with an ornamental button; sew a silk cord round the edge.

## RUGS

Very handsome hearth rugs may be knit either of rags cut and sewed as for rag carpets, and knit in garter stitch, or else of twine with bits of cloth, strands of thick Smyrna wool, or ravelings of tapestry Brussels carpet looped in. These rugs are much more easily managed if knit in strips or blocks and afterwards sewed together. They may be made oblong, oval, or round as suits one's taste. The colors may be arranged so as to form a sort
of pattern. Thas, in oue rug in my own possession, the centre is a small oblong piece of about twice as long as it is wide. This is borderell by a strip of dark green, again surrombled by a stripe of red and black mixed, and all bordered with a narrow edge of black. In an. other, the centre is a small square of what is commonly called in " hit or miss" pattern, blne, yellow, red and black being the predominating colors. Aromnd this is a piece knit in gray and white inch wide stripes which is sewed round the square piece in such a way as to give a circular shape to the mat. The edge next to the square is slightly gathered in. Next comes a gray border, and then a piece of Roman stripe in which the colors nsed in the centre are emplojed. In this rug both cotton and wooleu rags are used, lut of course it would be much handsomer made entirely of woolen pieces.


Fig. 120.
Still another was knit in one piece abont three-quart ers of a yard wide and of a proportionate length. It was knit in "hit or miss" fashion, a great deal of black being used and the colored pieces being very bright and
decided in eolor. It was finished by a fringe of worsced tied into either end, and the effect was quite oriental.

Figures 120 and 120a give the pattern and manner of knitting another kind of rug. The one illustrated is knit of heavy Smyrna wool and is in a set pattern, but a very pretty effect is produced by using the colors so as


Fig. 120a.
to produce a kaleidoscopic effect for the centre, then bordering with a stripe of solid color. By a judicious choice of colors, such as Pompeiian red, two shates of peacock blue, two ot olve and dark wood brown. a good mitanion of a 'Iurkej rug may be obtanea.

In kmitting this rug, coarse mbleached knitting cotton and coarse steel knittiug ueedles are used. The wools must be cut into equal lengths, abont two inches. A grood plan is to wind them on a mesh and then ent one side with a sharp knife.

The fommation is knit in plain garter stitch, and like the rug's described above are more easily managed in strips or blocks, which are afterwards sewn together. To knit in the wool, lay the end of the wool between the last knitted stitch, and the one abont to be begun, so that the shorter half is in front; a stiteh is then knitted off, and the hind end of the wool put in front, holding this firm at the same time with the fresh laid in one, with the thumb of the left hand.

After knitting a row of loops in, knit one row perfectly Main, and then knit in another row of loops, and so on to the end of the strip. In knitting these strips, always slip the first stitch and knit the last of every row with-
ont putting in a piece of wool. Pieces of woolen cloth may be used instead of the Smyrua wool. Tapestry Brussels, carpeting cut into strips of uniform width and then raveled out also furnish nice material for these rugs.

If a whole rug seems too great an undertaking, a centre of handsome carpeting (remuants of which can be procured at a low price in the city stores), edged with


Fig. 121.
a wide knit border, is very pretty. These rugs should be lined with old carpeting, gray linen, or hemp carpet. QUILTS.
Fig. 121 is an extremely pretty quilt which has
also the advautage of being rery simple. The patteru will be best understood by a reference to the border. The centre of the quilt is knit in squares which are so knit as to cause the pattern to ron diagonally across them.

Cast on one stitch, and knit nine rows of plain garter stiteh, always throwing the thread round the needle at the beginning of each row.

When you have ten stitches on your needle, which should be at the end of the ninth row, proceed as follows:

10th row: M 1, P 4, M 1, K 1, M 1, P 5.
11th row: M 1, knit plain all the stitches till you come to the first made stitch in the last row, purl three, knit platin to the end of the row.

12th row: MI 1, purl all the stitches until you come to those purled in the last row. M 1, K 3, M 1, purl to the end of the row.

13th row: M1, K all the stitches to the raised pattern, purl five, $K$ to the end of the row.

14th row: M 1, purl to the raised pattern, M 1, K 1, slip one, knit two together and pass the slipped stitch over them. K 1, M 1 , purl to end of row.

15th row: M $1, \mathrm{~K}$ to raised pattern, purl five, K to end of row.

Repeat fourteenth and fifteenth rows six times more.
Then MI 1, P to raised pattern, K 1, S 1, knit two together, draw slipped stitch over these, K 1; P to end of row.

In the next row, M 1, knit to pattern, P 3, knit to end of row.

To finish the raised pattern, knit the three stitehes together. The other stitches of this row are purled.

This finishes oue stripe of the square. Now knit as follows:
t
1st row: MI $1, \mathrm{P}_{\mathrm{o}} \mathrm{J}$

2nd row: M $1, \mathrm{~K}$.
3rd row: M $1,{ }^{2}$.
4th row: M 1, purl.
5th row: M 1, knit plain.
6th row: M 1 , purl.
7th row: M 1, purl.
8th row: M 1, knit plain.
9th row: M 1 , purl.
a 1
The 10 th row begins the pigue pattern.
1st row: M $1, P 1, S 1$, letting the thread lie in front of the slipped stiteh.

2nd row: M $1, \mathrm{P}$ thronghont.
Repeat these three rows fire times, but begiming the alternate rows on the right side of the work with a slip stitch after the made one, and then a purl stitch, which will give the honeycomb appearance in the pattern.

Repeat the rows a-a, and begin the second stripe of raised patterns. The row begiming this stripe should have sixty stitches, and has nine leaf patterns. Begin the first leaf pattern after the third purled stitch in the row.

Having knit this stripe, repeat from a-a; then repeat the pique stripe; repeat from a-a; begin the thind leaf row:

When there are 122 stitches on the needles, begin to decrease so as to form the other side of the square. After the made stitch in each row, knit two together, and knit two together before the last stiteh.

Throughont the square, never neglect the made stiteh at the beginning of every row.

The central part of the border is knit after the same pattern, only omitting the made stitch at the beginning of the rows. This border is edged on the one side with an open work pattern and on the other with a narrow lace. For the open work, cast on fom extra stitehes
(the border takes twenty-nine), and for the lace cast on seven extra.

For the open erlge, knit the four stitches at one side


Fig. 121n.
of the border always thus: K 2, M 1. T 2. Always slip the first stitch of the row. Knit the lace thus:

1st row: $\mathrm{S} 1, \mathrm{~K} 4, \mathrm{M} 1, \mathrm{~T}$.
2nd row: K 2, M 1, T, M 1, T, K 1.
3rd row: S 1, K 1 , theu K 1 and P 1 out of the made stitch, K 2, M 1, T.

4th row: K 2, M 1, T, K 4.
5th row: S 1, K 5, M 1, T.
6th row: K 2 , M 1, T, M 1, T, M 1, T, K 1, K 2.
7th row: S 1, K 1, then K 1 and P 1 out of the made stitch, K 1, again K 1 and P 1 out of the made stitch, K 2 , M $1, \mathrm{~T}$.

8th row: K 2, M 1, T, K 7.
9th row: S $1, \mathrm{~K} 8$, M 1, T.
10th row: K 2 , M 1, T, M 1, T, M 1, T, M 1, T, K 1.
11th row: $\mathrm{S} 1, \mathrm{~K} 1$, then K 1 , and P 1 nut of the made stitch, again K 1 and P 1 out of the made stitch, $\mathrm{P} 2, \mathrm{M}$ $1, T$.

12th row: K 2, M 1, T, K 10.

rig. 122.
13th row: Seven times one stitch is always to be cast off. K 4, M 1, T. This leaves seren -stitches on the needle. Repeat from second row.

This lace makes very pretty edging knit in linen thread, with moderately coarse needles.

Fig. 122 as seen in the illustration, is knit in hlocks, six segments being required for each block.

Cast on forty-one stitches.
1st row: Slip first stitch, purl eighteen, put jour needle in at the back of next stitch, slip it off withont knitting, knit next two together, pitting in the needle at the back (T. B. hereafter will be used to desigmate knitting two together in at the back of the stitch), put the slipped stitch over the one just knitted, purl nineteen.

2nd row: Knit plain. The first stitch of each row should be slipped.

3rd row: Knit two, * make one, T B, repeat to the middle, take in three at the back, repeat to the end of the row, knitting the last two stitches plain.

4th row: Knit plain.
5th row: Knit two, make one, T B * knit two, purl two, repeat from * to the middle, take in three at the back, knit to the end in the opposite direction, so that the last six stitehes will be knit thus-knit two, make one, T B, knit two.

6th row: Knit fomr, then alternately purl two, and knit two plain the last fom stitehes, which are knit alike at the end of every row, viz, make one, T B, knit two.

Repeat these last two rows, mitil all the ribbed knitting is narrowed off to a single stiteh, after which knit plain, always remembering to take in three stitches at the back in every alternate row.

Figure 123 shows how these sections are put together. A few long stitches are worked with a meedle in the centre.

When the blocks are all knitterl, they are sewed to. gether, half blocks being used down the sides, so as to form a straight erlge. If preferred, the ends can be
finished in the same way, and a border of cable or other fancy knitting put around. Or the ends may be finished off in points, using whole blocks for the purpose, and the following border may be used.


Fig. 123.
I This border must be knit in picces just fitting each point. Cast on eiglit stitches. In the first and every alternate row, three stitches must he knit together at the back, in the middle of the row. In order to keep the same number of stitches on the needles, one monst be made at the begimning of each row. Knit as follows:

1st row: Slip one, TB, drop the next foundation stitch off the needle, throw your thread over twice, repeat from * to the end of the row, knitting the last stitch, and not forgetting the narrowing in the middle.

2nd row: Knit plain, almays putting your needle in at the back of the second made stitch.

* 3rd row: Purl, making one stitch at the beginning or the row, and knitting three together at the back, in the middle of the row.

4th row: Knit plain.
5th row: Like third.
6 th row: Like fourth.
7th row: Knit plain, increasing at beginning of the row, and narrowing three stitches in the middle.

8th row: Purl.
9th row: Like seventh.
10th row: Like eighth.
Repeat from * until the border is deep enough, then tie a fringe in after one of the patterns given under "Macramé Lace."

ANOTHER QUILT.
This quilt is knit in strips and sewn together. The pattern would also form a good border for a quilt knit in squares or shells.
Cast on seventy-three stitches. Always slip the first stitch on each row.
1st row: Knit plain.
2ud row: Purl.
3rd row: Slip first stiteh (as in every row), * knit two together, six plain, thread over, knit one, thread over, knit one, knit six, knit two together, knit two together, knit six, thread over, knit one.

Repeat from * twice, making three herring bones, then knit six, thread over, kuit oue, thread over, knit one, knit five, knit two together, knit one.

Repeat until your piece of knitting is long enough for your quilt.

## CABLE KNITTING.

Cast on eighteen stitches for a stripe, thus for six plain stitehes on each side of the cable, for two patterns thirty stitches will be required, and so on.

1st row: Purl six, knit six, and purl six.
2nd row: Knit six, purl six, nit six.
3rd row: Like first row.
4th row: Like second row.
5th row: Like third row.

6th row: Knit six, take a third weedle and purl three; with the first right-hand needle purl the next three stitches, and knit six.

7th row: Purl six, knit the three stitehes on the third or additional needle, knit the three stitches on the lefthand needle, purl six.

8-th row: Like second row.
Commence again, as at first row.
It is always well to cast on several stitches each side of the number needed for the pattern; these stitches can be knit in some fancy patteru or in plain garter stitch.

The following is a pretty stitch to edge the cable pattern with:

Cast on six for each pattern, and two over, so as to have one stitch knitted plain on either side.

1st row: Throw the thread over, purl one, purl two together, repeat.

2nd and 4th rows: Purl.

## EDGINGS.

The following edgings can be kuit either in cotton or linen thread. Kuit with thread on rather coarse needles, they are very lace like in effect and make extremely pretty trimmings.

VANDYKE BORDER.
Cast on seven stitches. Knit two rows, plain.
3rd row: Slip one, knit two, bring the thread forward, knit two together; bring the thread forward twice, knit two together.

4th row: Bring the thread forward, knit two, purl one knit two, bring thread forward, knit two together, knit one.

5th row: Slip one, knit two, bring the thread forward, knit two together, knit four.

6th row: Knit six, bring thread forward, knit two together, knit one.

7th row: Slip one, knit two, bring thread forward, knit
two together, bring thread forward twice, knit two together, bring thread forward twice, knit two together.

8th row: Knit two, purl one, knit two, purl one, knit two, bring thread forward, knit two together, knit one.

9 th row: Slip one, kuit two, bring thread forward, knit two together, bring thread forward twice, knit two together, bring thread forward twice, knit two together, bring thread forward twice, knit two together.

10th row: Knit two, purl one, knit two, purl one, knit two, purl one, knit two, bring thread forward, knit two together, knit one.

11th row: Slip one, knit two, bring thread forward, knit two together, knit nine.

12th row: Cast off" all but seven, knit four, bring thread forward, knit two together, knit one.

This finishes the first pattern. Repeat, beginaing at the third row.

## KNitted Lace.

Cast on twelve stitches with fine cotton or thread.
1st row: Slip one, kuit two, purl one; knit two to. gether; turn the thread once round the needle, knit two, purl one, knit one; turn the thread once round the needle, knit two, taken together at the back.

2ud row: Slip one, knit one; turn the thread twice round the needle, knit two, purl two together; turn the thread once round the needle, knit one, purl two together; turn the thread twice round the needle, purl two together, knit one.

3rd row: Slip one, knit two, purl one, knit two; turn the thread once round the needle, kuit two together, taken at the back, knit one, knit two together, kuit three.

4th row: Slip one, turn the thread once round the needle, purl one, kmit two together; turn the thread once round the needle, knit fom, purl two together;
turn the thread twice round the needle, purl two together, knit one.

5th row: Slip one, kuit two, purl one, knit two, knit two together; turn the thread wice round the needle, knit three, purl two together, kn:.. one.

6th row: Slip one, kni: one, pass the slip stitch over it, slip one, knit one, pass the slip stitch orer it; slip one, knit one, pass the slip stitch orer it; siip one, knit two; turn the thread once round the needle, purl two together; knit one, turn the thread twice round the needle, purl two together, knit one.

EDGING.



Fig. 124.
Cast on seven stitches.
1st row. Slip one, knit two, make one, knit two together at the back, make two, knit two.

2nd row: Slip one, knit one, knit one and purl one in the madestiteh; knit two, make one, knit two together at the back, knit oue.

3rd row: Slip one, knit two, make one, knit two together at the back, knit four.

4th row: Cast off two, knit three, make one, knit two together at the back, knit oue.

## KNITTED CUFF AND COLLAR.

For the knitted lace shown in No. 126, cast on nineteen stitches.

1st row: Slip one, knit tro, make one, knit tro together, kuit one, make one, knit two together, knit three, knit two together, make one, knit one, knit two together, make one, knit three.

2nd row: Knit three, make one, knit one, knit two together, knit one, make one, knit two together twice, knit one, make one, knit one, knit two together, make one, knit one, knit two together, knit one.


Fig. 125.
3rd row: Slip one, knit two together, knit one, make one, knit two together, knit one, make one, knit three together, make one, knit one, knit two together, make one, knit five.

4th row: Knit six, make one, knit tro together, knit one, make one, knit one, make one, knit one, knit two together, make one, knit one, knit two together, knit one.

5th row: Slip one, knit two together, knit one, make one, knit two together, knit one, make one, knit one, make one, knit one, knit two together, make one, kuit seven.

6th row: Knit eight, make one, knit two together, knit three, knit two together, make one, knit one, knit two together, knit one.

7th row: Slip one, knit two together, make one, knit one, knit two together, knit one, knit two together, kuit one, make one, knit two together, knit six.

8th row: Kuit five, knit two together, make one, knit one, kuit two together, knit one, knit two together, knit one, make one, knit two.

9 th row: $\mathrm{Sli}_{\mathrm{i}}$ one, knit one, make one, knit one, knit two together, make one, knit one, make one, knit two
together, knit one, make one, knit two together, knit four.


Fig. 126.
10th row: Knit three, knit two together, make one, knit one, knit two together, make one, knit three, make one, knit two together, knit oue, make one, knit two.

11th row: Slip one, knit one, make oue, kuit one, knit two together, make one, knit five, make one, knit two together, knit one, make one, knit two together, knit two.

12th row: Knit one, knit two together, make one, knit one, knit two together, make one, knit one, knit two to. gether, pass the cotton twice round the pin, knit two together, knit two, make one, knit two together, knit one, make one, knit two.

13th row: Slip one, knit two, make one, knit two together, knit oue, make one, knit two together, knit one, knit one and purl one in the made stitches, knit two to-
gether, make one, knit one, knit two together, make one, knit three.
Repeat from the second row three times more, then cast on thirteen stitches for the top of collar.
1st row: Knit one, slip one, make one, slip one, knit two together, pass the slipped stitch over the two knitted together, make one, knit three, make one, slip one, knit two together, pass the slip stitch over two knitted together, make one, kuit two, continne the second row of edge.
2nd row: Commence with the third row of edge, then knit two, purl nine, knit two.
3rd row: Kuit one, slip one, kuit three, make one, slip one, knit two together, pass the slip stitch over the two knitted together, make one, knit five, contime with the fourth row of edge.
4th row: Commence with the fiftlo row of edge, then knit two, purl nine, knit two.
Contimue from first row of top with the sixth row of edge, then the secoml row of top with the sedenth row of edge, and so on, till sou have worked the length required of the bam, when you east off thirteen stitches and continue the lace for the other side.

## KNITTED GAP.

Materials: Strutt's knitting-cotton, No. 12; steel pins, No. 14.

For the foundation (see Figure 127) cast on eighty-five stitehes, and one over for the slipped stitch.
1st row: Slip one, * make one, knit two together, knit seven, knit two together, make one, knit one. Repeat from *.
2nd row: Slip one as if for purling, purl one, * make one, purl two together, purl five, purl two together, make one, purl three. Repeat from *. Eud with make one, purl two.

3nd rom: Slip oue, knit two, * make one, knit tro together, knit three, knit two together, make one, knit five, Repeat from *. End with make one, knit three.


Fig. 127.
4th row: Slip one as if for purling, purl three, * make oue, purl two together, purl one, purl two together, make one, purl seven. Repeat from*. End with make oue, purl forr.

Now repeat from first row. The top and bottom are drawn in to the shape.

For the lace trimming (Figure I28), east on as many stitches as there are round the eap, allowing a few over for sewing on-about 216. The pattern is divisible by six.

1st row: * Knit fire, drop the next stiteh on the left.
needle, pick up the back one, and put it on the righthand needle. Repeat from *.

2ad row: Purl.


Fig. 128.

3rd row: Knit one, * take off two stitches as if you were going to knit them together, take the under one on to the left pin, knit it together with the next stitch on the left pin, pass the second stiteh on the right needle over the last, knit one, make one, knit one, make one, knit one. Repeat from *.

4th row: Purl.
5th row: * Take off two stitches, and work as before described in third row, make one, knit three, make one. Repeat from *.

6th row: Purl.
7th row: * Knit two together, make one, knit four. Repeat from *.

8th row: Purl.
9th row: Knit.
10th row: Purl.
11th row: Knit two together, * make one, knit two together. Repeat from *.

12th row: Slip one, knit two together, make one, knit two togeher. Repeat from *. Cast off. On top of this row, crochet as follows:-One quadruple treble in the first stitch, one chain, pass over one. Repeat.

Sew on to cap. A ribbon is run through the treble row, and finished with a bow at the top and bottom of cat.

## KNITTED LACE.

Cast on fourteen stitches.
Knit one plain row:
1st row: Slip two, knit two, make one, knit two together at the back, knit one, make one, knit two together at the baek, slip fire, pass the fourth over the fifth, third over the fourth, second over the third, slip two oft the right-hand needle on to the left, make three, knit two together.
2nd row: Make one, linit one, purl one, knit one, purl one in the three made stitches, linit two, make one, knit two together at the back, knit one, make one, knit two together at the back, purl two.
3rd row: Slip two, knit two, make one, knit two together at the back, knit one, make one, knit two together at the back, knit five.

4th row: Make one, kuit two together at the back, knit five, make one, knit two together at the back, knit one, make one, knit two together at the back, purl two.

5th row: The same an 3 rid row.
6 th row: The same as 4 th row.
7th row: The same as 3 rit row.
8th row: The same as 4th row.
9th row: The same as 3rd row.
10th row: The same as 4 th row.
11th row: The sime as 3rd row.
12th row: The same as 4 th row.
Repeat from first row.


Fig. 129.
Cast on twenty-one stitches, and knit a plain row.
1st row: Slip two, knit two, make one, knit two together at the back, make two, purl two together, slip two, knit one, pass three stitches separately on the right hamd needle orer the last stiteh on the right hand needle, make two, purl two together, slip two, knit one, pass the three stitches over as hefore, make two, purl two together, slip two, knit one, pass the three stitches as before.
2nd row: Slip one, * knit one, purl one, knit one, purl one (the last four stitches are worked in the two made stitches of the previons row), knit one, repeat from *, knit one, repeat from first *, knit two, make one, knit two together at the back, purl two.
3rd row: Slip tro, knit twó, make one, kuit two together at the back, knit fifteen.
4th row: Slip one, knit sixteen, make one, knit two together at the back, purl two.

5th row: The same as third.
6th row: The same as fourth.
Repeat from first pattern row.

## NECKERCHIEF AND HEAD-DRESS.

The design is shown folded orer as a neckerchief in Figure 130. Either of the trimmings shown in Nos. 131 and 132 is suitable for it.


Fig. 130.
It may be made in white or colored Lady Betty, or in Shetland wool; with pins, No. 9 (bell gange).

For the foundation, in plain knitting, cast on twelve stitches, increase one at the beginning and end of each row by knitting and purling the second stiteh from the culd when you have one hundred stitches on the needle decrease to twelre again by knitting two together at the begimning and end of each row.

This completes the foundation.
For lace No. 131 cast on eighteen stitches.
1st row: Slip one as if for puling, slip one, knit one, pass the slipped stitch orer, make one, slip one, knit one, pass the slipped stitch over, knit three, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stiteh over, knit one, pass the second stitch on the right-hand needle over it, make one, slip one, kuit one, pass the slipped stitch over, knit one.

2ud row: Slip one, knit three, purl one in the same made stitch, knit one, knit one, purl one in the made stitch, knit five, knit one, purl one in the made stitch, knit two.


Fig. 131.

3rd and 4th rows: Plain knitting.
5th row: Slip one as if for purling, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, knit two, slip one, knit one, pass the slipped stiteh over, make one, slip one, knit one, pass the slipped stitch over, knit one, slip one, knit one, pass the slipped stitch over, make one, knit three.

6th row: Slip one, knit two, knit one, purl one in the made stitch, knit three, knit one, purl one in the made stitch, knit four, knit one, purl one in the made stitch, knit two.

7th and 8th rows: Plain knitting.
9th row: Slip one as if for purling, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, knit one, slip one, knit one, pass the slipperl stiteh over, make one, slip one, knit one, pass the slipped stitch over, knit three, slip one,
knit one, pass the slipped stitch orer, make one, knit three.
10th row: Slip oue, knit two, kuit one, purl one in the made stitch, knit five, knit one, purl one in the made stitch, knit three, knit one, purl one in the made stitch, kuit two.

11th and 12th rows: Plain knitting.
13th row: Slip one as if for purling, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pasis the slipped stitch over, knit two, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, knit one, slip one, kuit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, slip one, knit one, pass the slipped stitch over, knit one.

14th row: Slip one as if for purling, knit two, knit one, purl one in the made stitch, knit three, knit one, purl one in the made stitch, knit four, knit one, purl one in the made stitch, knit two.

15 th and 16 th rows: Plain knitting.
17th row: Slip one as if for purling, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, knit three, slip one, knit one, pass the slipped stitch over, make one, slip one, knit one, pass the slipped stitch over, knit one, pass the second stitch on the right hand needle over it, make one, slip one, knit one, pass the slipped stitch over, slip one, knit one, pass the slipped stitch over, knit one.

18th row: Slip one as if for purling, knit two, knit one, purl one in the made stitch, knit one, knit one, purl one in the made stitch, knit five, knit one, purl one in the made stitch, knit two.

19th and 20th rows: Plain knitting. Repeat from 5th row. Sew on to the foundation.

For No. 132 cast on fifteen stitches.
1st row: Slip one, knit eight, make one, knit two to-
gether, make one, knit two together, make one, knit two together.

2nd row: Kuit plain, knitting and purling each made stitch.


Fig. 132.
3rd, 4th and 5th rows: Plain knitting.
6th row: Cast off three, knit the last plain. Repeat from first row.

BABY'S SHIRT.
The following is a very simple ruie for a high-necked and long-sleeved shirt:

Use two-threaded, all-wool, Saxony yarn; ivory or rubber needles of the ordinary size for such yarn.

Cast on one hundred stitches; knit thirty-two rows plain; this forms the shonlder.'

33rd row: Slip first stitch, knit two together, the rest plain.

34th row: Plain.
35th row: Slip one, knit two together, the rest plain.
36th row: Plain.
37th row: Slip one, knit two together, rest plain.
38th row; Plain.
39th row: Slip one, knit two together, rest plain.
40th row: © Plain.
41st row: Slip one, knit two together, rest plain.
42nd row: Plain.

43nd row: Slip one, kuit two together, rest plan. 4th row: Plain.
45th row: Slip one, knit two together, rest plain.
Yon have now narrowed seven times on one edge; now knit fourteen rows plain. Bind off thirty-tive stitches, then knit thirty-five stitehes on the same needle again. This leaves an opening for the frout. Now kuit fonten rows phain; now widen one stitch at the begimning of every alternate needle (always slip first stitch until you have widened seven times)-yon will then have one hundred stitehes again. Knit thirty-two rows plain amd half the shirt is dome. Bind off thirty-five stitehes for armhole; make thirty-tive stitehes again, then proeed as for the front, only omitting the opening in front. Bind off all the stitehes and sew edges together from the bottom, leaving thirty-five stitches open for the other arm hole. Sew the shonders together.

For Sleeven. Cast on forty stitches. Knit eishtyeight rows phain. Bind off all but eleren stitehes. Kinit these until a little simare is formed; bind off. This makes a gusset for top of sleeve. Pick up the loops * on the lower edge of the sleeve on No. 15 steel needles. Knit a ribbed wrist (knit two, purl two) abont one and one-half inches long. Sew up, the sleeve, trimming the side of gusset to the straight side. Sew the point of ginsset into lower noteh of arm hole.

Crochet a row of shells on bottom of shirt. Face one side of opening in front with narrow white ribbon, and sew on three buttons. For holes, crochet a looped edge on the other side and all aromed the neck; also a row of shells aromed the neek. Run a narrow ribbon in the holes romnd the neck.

## LOW NECKED BABY SHIRT.

Cast on any number that ean be divided by ten.
1st row: Knit two together, knit two, thread forward, knit one, thread forward, knit three, knit two together."

2nd row: Purl.
3rd row: Plain knitting. Repeat from first row. This forms a scalloped patteru. Knit a piece several inches deep, then knit in ribs of two plain, two purl, until the shirt is the required length.

These shirts are knit in two pieces, which are afterwards sewn together, leaving an opening at the upper end for the armhole.

When the knitting is of the required length, finish with a row of holes to within eight inches of one end. Cast off all but these eight inches, and knit them plain, carrying a row of holes along either edge, for a sloulder strap. (Holes are made by making a stitch and knitting the next two together. On the return row, knit plain.

Having knit both pieces, sew up and finish with a row of shell stitch crocheted into the upper edge, and around the arm holes. If sleeves are desired, knit pieces of the requisite size in the scallop, pattern and sew them in. Run a narrow ribbon through the holes in the neck, and tie in a bow.

## BABY'S BOOT.

A very simple pattern for a baby's boot is as follows:
White Berlin and Needles No. 13. Cast on thirty; and knit twenty-four rows plain on in any fancy stitch you like, for the leg; for the last row *, knit two, frool over the needle, knit two together. Repeat from *. This forms holes, into which ribbon must be run after the boot is finished.

Twenty-fifth row: From this time forward you must knit one, purl one; reversed every third row, to make a kind of dice pattern. Cast on eleven extra stitches at the end of each of the next two rows, making fifty-two in all. Increase at the beginning of every row until there are sixty-two stitches; do four plain rows; then decrease in the same way till you hare only fifty-two again. Take
off and sew up. Crochet a double scallop at top in blue wool, for a finish.

## KNITTED PURSE.

One skein blue and one black of purse twist.
Cast on seventy-two. Knit two together, make one, knit one. Repeat. Second row plain. When broad enough double it and sew up, leaving about three inches open for the money to slip in. Finish off with steel rings and tassels.

## ANOTHER PURSE.

One-half ounce E E Corticelli Purse Twist or onehalf ounce No. 300 Florence Knitting Silk, and two No. 18 needles.

Cast on to one needle fifty-nine stitches, knit across once plain.
2nd row: Purl two together, then repeat until only one stitch remains, knit one.
3rd row and every two after until the sixty-fifth is reached, the same as the second.
Now do eighty-three rows of plain knitting (garter stitch), then knit sixty-four rows of the fancy pattern the same as at the beginning, knit one row plain and cast off. Sew up the edges, learing an opening of two and one half inches. Finish with stecl rings and tassels of steel beads.
Many varieties of fancy patterns are formed by combinations of knitted, purled, and slipped stitches; these patterns being useful in knitting shawls, tidies, stockings, etc. When used for round knitting, as in stockings, care must be taken to reverse the stitch in every alternate row, that is a plain stitch must be purled, a purled stitch plain.

## RAIN PATTERN.

Fourteen stitches are required for each pattern.
lst row: Kuit one, thread forward, knit five, slip one,
knit two together, pass the slipped stitch orer, knit five thread forward. Repeat. This makes a seallop.

BARLEY-CORN STITCH.
This simple stitch is very suitable for borders, or to use as an edge for cable or plait knitting.

Cast on any uneven number of stitehes.
Slip the first stitch, keeping the thread in front of the needle; turn the thread ronnd the needle, so as to bring it in front again; knit two together, taken in front. Continne turning the thread rombl the needle and knitting two together to the end of the row. All the rows are alike.

## ORAVAT: KNITTING.



Fig. 133.
Berlin or Shetland wool, two pins No. 12 (bell gange). Cast on thirty-one stitches, knit a plain row.
1st row : Knit four, slip one, knit one, pass the slipped stitch over, make one, knit one, make one, slip one,
knit one, pass the slipped stitch over, repeat from the beginning of this row twice more; end with knit four.

2ud row: Plain knitting.
3rd row: The same as first.
4th row: The same as second.
5th row: The same as first.
6th row: The same as second.
7th row: Knit two together, make two, knit two together, slip one, knit one, pass the slipped stiteh over, make one, knit one, make one, slip one, knit one, pass the slipped stitch over; repeat twice more, end with kuit two together, make two, kuit two together.

8th row: Knit all the row plain, with the exception of knit one, purl one, in the make two of last row.

Repeat from first row until sufficiently long to tie. Sew round it a knitted lace, made as follows:

Cast on ten stitches.
1st row: Slip one, knit one, make one, slip one, knit one, pass the slipped stitch over, slip one, knit one, pass the slipped stitch over, make tirn, slip one, knit one, pass the slipped stitch over, make one, knit two.

2nd row: Slip one, knit three, knit one, purl one in the made stitch, knit one, make one, slip one, knit one, pass the slipped stitch over, knit two.

3rd row: Slip one, knit one, make one, slip one, knit one, pass the slipped stitch over, knit fom, make one, knit one at the back, make one, knit two.

4th row: Slip one, knit eight, make one, slip one, knit one, pass the slipped stitch orer, knit two.

5th row: Slip one, knit one, slip one, knit one, pass the slipped stitch over, knit three, make one, slip one, knit one, pass the slipped stitch over, make one, knit one at the back, make one, knit one at the back, make one, knit two.

6th row: Cast off five, knit five, make one, slip one,
knit one, pass the slipped stitch over, knit two. Repeat from first row:

## SILK MITTENS.

For a medium sized hand, wearing six and one half or six and three-quarters, cast on of three hundred knitting silk on No. 20 needles seventy-two stitches.

1st row: * Purl one, knit one, purl one, knit one, over and knit one eight times. Repeat from * to end of third needle.

2nd row: * Purl one, knit one, purl one, knit seventeen. Repeat from *.

3rd row: Purl one, knit one, purl one, slip one, knit one and throw slipped stiteh over, kuit thirteen, knit tro together. Repeat from *.

4th row: * Purl one, knit one, purl one, slip one, knit one and throw slipped stiteh over, knit eleven, knit two together. Repeat from *.

5th row: Purl one, knit one, purl one, slip one, kuit one and throw slipped stiteh over, knit nine, knit two together. Repeat from *.

6th row: * Purl one, knit one, purl one, slip one, knit one and throw slipped over, knit seren, knit two together. Repeat from *.

This forms one row of shells. Repeat from tirst row until there are nine rows of shells for the wrist. Carry three rows of shells up, the back of the hand, making the purl one, knit one, purl one on each side. To form the gore of the thmmb widen about every fourth row until you have thirty-six stitehes, making a purled stitch on each side of gore and leaving between the last purl stitch at side of shell and purl stitch at side of thumb three stitches. Shape off the thirty-six stitches for the thumb, cast on twelve for the hand and knit plain to the end of the little finger and commence narrowing.

Reduce number of stitches in shells from nine to seven
and when near the top to five. To make the thumb, take up the thirty-six stitches, pick up the loops under the stitches cast one, and narrow in the corners to twelve stitches on a needle. Knit the required length and narrow off.

For a smaller size cast on sixty stitches and make each shell with seven instead of nine stitches. This pattern does equally well for Saxony yarn, and by some is considered as pretty as silk.

## KNITTED UNDER-VEST FOR LADIES.

The rest is commenced at the lower part. The number of stitches cast on must be regulated by the size of the person for whom the garment is intended with the pins and wool named; when knitted moderately loose, eight stitches must be cast on for the inch, and ten rows knitted to the inch.
For a rest measuring twenty-four inches round, about one hundred and ninety-two stitches must be cast on.
First to twentieth rounds: Knit two and purl two alternately. Now commence the basket pattern shown in the illustration.

First to seventh rounds: Purl three, kuit one.
From the eighth to fourteenth ronnds: Reverse the pattern by working a plain stitch in the centre of the three purl of previous seven rounds. These seven rounds are repeated alternately fourteen times more.

Divide the stitches equally, leaving half the number for the back on one pin. Let these remain without working them, until the fronts are knitted. Divide the stitches of the front equally on two pins, as each half must now be worked separately.

For the wrap-over: Cast on eight stitches on the buttonhole side; these must be knitted throughout. At equal distances make three buttouholes by knitting tiro, cast off four, and knit two.

In the following row: Knit two, cast on four, and
knit tro; these buttonholes must have ten plain rows between each.

The fronts must now be knitted back and forward, taking care to keep the ribs by knitting the purl-stitches and purling the knitted.

Work fourteen rows of the basket pattern, then commence the gores; work twenty-four stitches next the armhole; commence the gore by picking up one loop between the stitches and knitting it plain (the gores are plain knitting throughout); knit twelve stitches, contimuing the pattern, then beg:n the second gore; again knit twelve stitches.

In the three following rows: Continue the pattern, and knit the stitches of the gores.

In the fourth row: Iucrease a stitch by picking up one loop before and one after the made stitches for the gores and knitting them; this increase is continued till you have the gores the required length.
Cast off across the front, leaving twenty-four stitches for the shoulder; work as far as the top of shoulder, which you must judge the length of, by the size of armhole needed; cast off the twenty-four stitches. Work the second side of front in the same way, with the addition of the wrap and buttonhole before described.

Now continue the back as far as required till you have worked it from four to six rows higher than the front. Cast off all but the twenty-four stitches on each side; on these work the shoulders till long enough; join to front shoulders by sewing together. Pick up the stitches round the armhole ou three pins. The gusset under the arm is formed by knitting two stitches together in every third round exactly in the centre of under part of sleeve. When the sleeve is the required width continue to work round without decrease for twenty-one rounds, then cast oft.

For the crochet edge, which is worked round the neck and sleeves:-

1st row: One donble into each stitch at the edge.
2nd row: One treble into a stitch, one chain, pass over one stitch, and repeat from the beginning of the row.

3rd row: One double under one chain, four-chain, one double under same chain, three chain, pass orer three stitches, and repeat from the beginning of the row.

4th row: One treble nuder four chain, three chain, two trebles under four chain, three chain, two trebles under four chain, three chain, one treble under four ehain, one double under three chain. Repeat from the beginning of the row.

A ribbon is run throngh the second row of the neck, and is tied in front in a bow.

## BIRD NEST MATS.

Cut a circular piece of cardboard of the size desired for the mat; cover it with silk, silesia, or any appropriate material of a color harmonizing with the worsted used for the border. Shaded green is the prettiest color for these mats. Cast on sufticient stitches to make five or six inches in knitting, and cut a number of pieces of wool into eight inch lengths. Knit as directed for Smyrna rug (page 250) until you have a strip sufficiently long to go round the cardboard formdation. Cast off and comb out the knit in pieces until they are soft and fluffy. Sew one edge on to the foundation, letting the other edge staud mp. Turn this inside and catch to the hack of the knitting at a depth of two inches.

## FICELLF: LACE FOR MANTEL.

This is merely lace knit or crocheter from cord or twine. It is much used in the place of Macramé, being much more expeditiously made. In the chapter on crochet, some patterns are given for this work, but as
some prefer knitting, I subjoin a simple pattern. Many of the lace patterns would look very pretty in twine. Linen twine is the best, as it does not soil so quickly as the seine twine.
Cast ou forty-three stitches.
1st row: Knit four plain, then make one; knit two together, knit one plain, repeat this to the end of the row.

2nd row: Make one, knit two together, and knit one, repeating till only four are left on the needle. Now take three strands of fringe (which consists of the twine cut in pieces twenty inches in length), lay them across the work between the needles, knit one stiteh; bring the other end of the fringe over toward you; knit two stitches, then put it all back across the work together, and knit last stitch.

3rd and 5th row must be knitted like the first row; fourth and sixth like the second row.

7th row: Knit plain.
8th row: Purl, putting in fringe as before.
9th row: Knit five plain, put your thread over your needle twice; then knit one, and repeat till the last stitch, which is knitted plain withont putting the thread over the needle before it.

10th row: Purl two, slipping off the thread that has been put twice over the needle. Take six stitches on your needle, slipping the thread off between. Cross the three back stitches over the front ones, then purl them all through. When there are nine stitches left on the needle, purl five; then put in the fringe.

11th row: Knit plain.
12th row: Purl and put in the fringe.
Repeat from first row, until you have the necessary length.

## CHILD'S PETTICOAT.

The number of stitches to be used for this child's
petticoat will, of course, vary according to the yarn and needles used. The model is knit in red and white doubled Shetland lambs's wool; it will take two ounces of red, and three of white wool.

Cast on two hundred and sixteen stitches with the red wool.

1st row: Purl.
2nd row: Knit plain.
3rd row: Purl.
4th row: Knit plain.
5th row: Slip one, knit two together, knit three, * make one, knit one, make one, knit three, knit two together, make one, knit two together, knit three, repeat from * to the end of the row.

Sixth row: Purl.
7th row: Like the fifth.
8th row: Purl.
9th row: Like the fifth.
10th row: Purl.
11th row: Like the fifth.
12th row: Purl.
13th row: Like the fifth.
14th row: Join in the white wool, and purl the row.
15th row: Purl.
16th row: Knit plain.
17th row: Purl.
18th row: Purl.
19th row: Knit plain.
20 th and following rows, alternately like the fifth and sixth rows, until thirteen rows of white have been knitted; then join on the red and repeat from the fourteenth. Repeat these patterns until there are three patterns of red and two of white. Join on the white wool and knit forty-eight rows in brioche stitch; in the first row take three stitches together at the end of the row.

This petticoat is sery pretty knit in pale blue German-
town wool. One hundred and fifty stitches will be sufficient then. By using a greater number of stitehes hand. some skirts can be knit for ladies' wear. They are more comfortable when set ou a mustin yoke. They ean be kuit in two or more breadths and then sewed together.

One of the greatest comforts to an old person or an invalid is a pair of bed-shoes, and they are so easy of execution that a child conld knit a pair withont any difficulty. They are knit of double zephyr on bone or wooden needles. Cast on thirty stitches, and knit two rows plain; then one row of holes mate as follows: knit oue, throw threal forward, kuit two together, repeat to end of row.

The succeeding work is all plain kuitting (always slipping the first stiteh) until you have a piece two fingers in length; kuit another row of holes, two more of plain knitting, and cast oft. Double the oblong piece thus obtained, sew up the ends, aud rmn a piece of elastic through the holes long enongh to fit round the foot from the heel over the instep. Finish with a bow of ribbon on one of the seams. These look odd until worn, but fit the foot delightfully, and are an untold comfort to any one who suffers from cold feet.

Donble knitting is simple and very useful for cradle and crib blankets. To work it cast on the requisite number of stitches in wool (the kind depending on the warmth required; single zephyr or Germantown are both useful), and knit four or five rows plain. Then knit four stitches plain, * bring the wool to the front, slip a stitch and pass the wool back, and knit the next stitch; repeat from * to the last four stitches, which are to be knit plain. For the next row knit the slipped stitch, and slip the knit one, always bringing the wool forward before slipping the stitch, and returning it to the back of the work after so doing. If you knit tightly it is advisable to wind your wool twice round the peedle in knit-
ting the stitches of the double part, but be careful not to increase the number of stitches.

## PATCHWORK.

Patchwork is by ng means without its literary associations. Mary Scudder's attic boudoir, curtained off with patchwork quilts, has been pictured by Mrs. Stowe's pleasant pen, and, in the same novel, Miss Prissy's enthusiasm orer a new quilting pattern is quite realistic to any who have attender the country sewing societies of a few years ago, where "rising sum" and "basket" patterns were solemnly discussod. But the old fashioned patchwork quilts are "out," and crazy quilts are "in," so I give a few practical directious for this work.

The first thing is to collect scraps of silk, satin, plush, velvet, etc. Very good packages of silk may be bought at most of the large city stores, but you need not confine yourselves entirely to new pieces. Any scraps that are bright and fresh can be used. A good deal of black is desirable, and jou should by all means have a varied assortment of colors. Soft shades, and nentral tints are very useful. Brocades are especially desirable. It is wise to begin with a small piece of work, such as a sofa-pillow or a border for a table-scarf, or a chair-seat, and thus save yourself from becoming discouraged by too great an undertakiug.

A band of patchwork can be inserted between two pieces of plain material, such as satin, velvet, plush or silk. Take a piece of thin muslin or cheese-cloth for a foundation, and on this baste your pieces, turning in the edges as in log-cabin patchwork. If you wish your work to be artistic have a plan or motive in laying out your work. For instance, if you are making a band for a table-scarf, you can have a series of square or oblong tiles of a plain material, each one embroidered with a
handsome design. Or you may hare a number of small round fans, the sticks being worked in heavy chainstitch, and appropriate designs in outline can be worked (after you have all your pieces in place) on each fan. These should be arranged with as little stiffness as possible, and then the spaces between must be filled in with a mosaic of small pieces. Care must be taken to arrange the colors harmoniously, using neutral tints to separate violently contrasting hues. Having arranged all your pieces to your own satisfaction, the next step is to work all the seams with fancy stitches in various colors. All your odds and ends of embroidery silks will now be useful. Spangles, gold and silver thread, and flat gold braids are also used with good effect. Great attention must be paid to "keeping the balance true." That is, the ornamentation must be evenly distributed, not massed in any one spot. The same thing is true of the colors, which should be so managed as to avoid any patchy effects. All sorts of fancy stitches can be used for working the seams. Brier, coral, buttonhole, and point russe stitches are the most common, but a clever worker can make up many ornamental ones to suit her own fancy. For instance, a wide row of herringbone of black silk can have a fan of three or five stitches of a bright color worked at each point. For another place, the lierringbone can be of the color and the fans of black. Railroad stitch is very pretty also; it is quickly worked.
I recently saw a most beautiful quilt, a description of which may prove suggestive to some of my readers. The centre was a square of embroidered satin, the corners of which were cut off by the rounding edges of four large Japanese fans, of the folding kind. The mounts or upper parts of these fans were made of alternate strips of tro contrasting colors, black, I think, being one of these in all the fans. Across these a Japanesque floral pattern
was worked. The sticks were indicated by embroidery. Between these main blocks was a ground-work of mosaic worked dainily with fancy stitches and a few wee bits of floral decoration. On a rather large space of the mosaic was worked the monogram of the owner, and below that, with a spray of forget-me-not intervening, the date when the work was done. The whole was edged with lace having the outlines of the pattern run with colored silk, and was handsomely lined. A good quality of silesia will do for a lining, though silk is much to be preferred. A thin layer of wadding should be placed between the lining and the outside and caught together at intervals, but anything like regular quilting should be avoided.

Another beantiful piece of crazy work was a band for a portière in which two or three colors were so arranged as to shade from dark at the ends to light in the centre. The ornamentation, in this case, was extremely rich, and gold thread, ete., was lavishly used.

This patchwork can also be made from nice woolen pieces worked with crewels, and the latest attempt at it which I have seen was a bedside rug, made of odd bits of Brussels carpet, arranged smoothly on a strong foundation of hemp carpeting or ticking, and the seams covered with worsted braid worked with crewels and silks. This struck me as a peculiarly happy way of disposing of those bits of carpeting which are so apt to tantalize the housekeeper in her spring cleaning. I dare say, too, a small sum would purchase a sufficient variety of remnants to make several large and handsome to say nothing of durable rugs.

A few of the old homespun sheets of our grandmothers days, still remain as treasures in some families. A good use to put them to is to convert them into summer counterpanes, decorating them either with crewel work, or with floral designs in turkey red or ingrain blue calico
appliqued on to the linen, the vcins being worked in with black on a darker shade of the same color, as the calico, and the leaves and flowers connected by graceful lines of stem stitch. Such quilts, made in the time of Queen Ame, have been preserved to the present day.
A rather unique quilt was made by a friend of mine as a gift to her minister's baby. It was made of alternate blocks of white and colored calico, and on the white blocks, the letters of the alphabet, cut from red or blue calico were appliquéd.
The down from many different plants can be gathered through the summer, and used to stuff small bags neatly made, which, when a number are sewed together will furnish a very good imitation of a down quilt. The small white everlasting flower, sometimes called moonshine, furnishes quite a good amount of this regetable down.

## ODDS AND ENDS.

In looking orer my note-book, I find, as often happens to a housekeeper in clearing ont closets and drawers, quite a number of things noted down which cannot easily be classified. Such "hints" I have reserved for this final chapter of " odds aud ends," in which suggestions for both useful and ornamental work will be found.

## CLOSET BAGS.

Amongst the novelties brought out last winter mas a closet bag which recommended itself by its great capabilities in the way of holding the inmmerable necessary articles which so tend to "clutter up" closet shelves and floors. I give the dimensions of the one in my possession, althongh these might be altered to suit the space where the bag is to hang.

Three and a half yards of gook cretome are needed together with alpaca brain of a suitable color, and a number of stont eyes, by which the bag is fastened to the wall. The foumlation of the bag is made of a piece of cretonne twenty-six inches wide and fifty-four inches inches deep. Cut out a piece of cretonne thirty and oue half inches deep, twenty-six and one half inches wide at the top, and sloping on either side to a width of sixteen and one hali inches at the bottom. Cut the upper part into a deep concave scallop. Bind the top with a piece of braid. This piece forms two pockets for the reception 289
of mmbrellas and parasols. It must be placed in the middle of the lower part of the baek piece, basting the middle of the pooket to the middle of the back, and laying the lower part in a box pleat on either side of this seam. Stiteh this middle seam firmly down, and eover it with a piece of brain. To make these mobrella cases set well, baste the box pleats down the length of the pecket and then baste the whole pocket smoothly on to the back. On either side of this midde compartment place three pockets graluated in size as follows, remembering to lay a box pleat in each one before putting it on the back. The dimensions for the pockets are as follows: twelve hy fifteen inches for the lowest; nine and a hale loy fifteen for the middle one; and eight by twelve for the top one. Of comse, one side must be sloped a little to accommodate the slope of the umbrella cases. Cover the seams hetween the side and central pockets with hama. Above these put on three pockets fourteen inches Heep by sixteen inches wide (before the lox pleat is laid), hinding and dividing these by braid. Cut a slanting piece off each upper corner, leaving room for a small pocket six and one-half inches in depth by eleven inches ill width.

Bind with braid, and sew large eyes all romd the bag at regular distances by which it may be fastened with large tacks to the door or wall.

Every one who has to pack a trunk often, knows the tronble of doing up shoes comfortably. A number of small bags or cases made of any stont material will be found a great convenience. These can be made to accommodate either a single shoe or a pair, and may be in the form of an oblong bag with a rmming string, or matle like a pocket with a flap coming over the top and buttoning. Of course, these cam be ormamented or not at pleasure, but if made of stout brown trilling, and marked in indelible ink with the name of the shoe they are to
contain, ther will be fomm even thongh not "things of beauty," yet "ioys forerer."

The following iugenions way of corering bottles may


Fig. 134.
be found useful for those extremely awkward bottles in which German ean de cologne is bought.

Procure some fine but good twine and at packing needle throngh which the twine can be threaded. Tie a piece tightly round the neek, carry it down the side, and tie it round the bottom of the bottle, up the opposite side, romd the neck again, and down to the bottom. Thread the twine and work from the bottom to the neck. Make a row of close buttonhole stitches over the loop at the bottom, to begin with, and then work rows of loose buttonhole stitches round and romd the bottle. Overcast the loops round the neck and plait a string to hang up hy. If you have a Chinese ginger jar with the cane net WQrk which is generally orer them, you will see immediately how the fomdation loops are to be pat on.

IABLE MATS.
Tery serviceable mats can be made of a kind of twine plait work, executed as follows: You will need for this
work a wooden frame about the size and shape of the mat you propose making, with rows of pegsor large pins inserted at the toll and bottom. Common seine twine can be userl, the size to be chosen to suit your taste. Donble the string and wind it up and down the fame in the pegs until it is quite full. Now thread a small backing neerle with the twine, using it donble, and dann in amd out oif the strands, over two, and under two. Cut the twine off at the end of each line of darning. When the whole is darned, busla the bate well over with thick paste while the mat is still in the frame, and let it get thoronghly dry. Have ready a piece of mill board ent to the required shape and covered on one side with cambric or merino. Unt the plat work to fit the fombdation, and baste the edges fimby to the mill boamd, binding with ribbon or tape to mateh the lining. To finish the mat plait nine strands in athree plat braid and sew over the binding. If the plait work is heavy enough, the mill-board can be dispensed with. Two or more colors cian be used in the work thus producing a checkered pattern. Cross work patterns can abso he worked on them.

TO TRANSFER (OLORED PLATES TO GLASS
Very pretty transparencies can be matle by carefully transferring good enlored plates to glass, by the follow. ing process:

Laty a smootli, thin coat of Venice turpentine on the glass, and then take the print and wet it on the back with a sponge dipped in water. Make it moist enongh to render the picture soft, withont being watery. Lay the pictmre, face downwards, on the thrpentine, now carefully rub the paper away on the back with the fingers. If the paper dries too much before it is finisherl, it inust be wetted again. When all the paper is worked off, let it dry, and with a fine camel's hair brush, lay a
coat of oil of turpentine over the whole. I have seen prints transterred to white wood in the same way. In this case, the wood was carefully varnished and polished after the design was laid on. Great care shond be exercised in rabbing of the paper at the back, as it is an exceedingly easy matter to mh throngh to the glass.

## UTILIZING PEACH BASKETS.

Very serviceable and pretty scrap haskets can be made from peach baskats, ly painting them hark or any desimalle color, and then ornamenting them with a hama of embroidery, or a drapery of crochet or matcramé fringe. Several coats of paint shonld be phe on to hide the romghess of the basket, which should be lined with a suitable color. A pocket on one side for scraps which suggest donbts as to the propriety of throwing them away will prove a useful adlition.

A small peach basket similarly treated, would prove a convenient ornament for some sitting room mantelpieces, to be used as a receptacle for the various articles which are ant to gather there.

Two of the large peach baskets fistened together at the lower end, so as to foum an hom glass, and either painted or covered with cretome, gathered at marrowest part with a band of cretonne bound with braid or else with a ribbou, makes an excellent work hasket for holding large pieces of fancy work, or it may be used as the. family mending basket. If used for the latter, one or more pockets should be put on the lining of the upper basket for holding pieces and the other neeessary aids to darning and mending. A brace of inch wood in the sliape of a cross put at the bottom will serve to balance the liome-male table. If wisherl, a cover of heavy millboard covered with cretome can be fitted, to the upper basket or if the table basket is painted and trimmed
with fringe, felt or serge of the color used in painting cais be employed.

## SCRAP RUGS.

Reference has been made, in the chapter on knitting, to rugs made out of scraps of woolen eloth. Another kind can be made very easily as follows: Out your seraps (which may be of all varieties of material only taking eare that woolen pieces form a large proportion) into inch squares. Take a piece of twine three or four yards long and a needle sufficiently coarse to carry the twine; thread your pieces of cloth on the twine as though they were beads. When you have a sufticient number threaded, taking care to crowd them on the string, fasten your twine well into the last two or three stitches. Now roll the string of scraps round and romm, taking long. stitehes throngh and through to keep it flat. When it is quite firm, lay the mat on the Hoor or a table and pare dway the rough edges on both sides until the rug is about half its original thickness. If an oblong mat is preferred, it can be made by making a number of strings of pieces, as long as the desired width of the rug, sewing these strips firmly together. A border can be arranged without much trouble. It is worth while to try a little yellow or orange colored flannel to mix with the other scraps, because it adds so greatly to the effert. The patent dyes ean be used for old white flamel. Some white is also an improvement, time turning it down to a larmonious gray.

I have seen very handsome rugs made of pieces of woolen cloth cut to aniform size and then sewed on to a ticking foundation. In some, quite elaborate desigus had been attempted but the prettiest were those which were mate with a centre of mixed colors and a border of black. In many places, materials for these rugs can be ohtained at a very moderate cost, at a tailor's shop.

Mr. Howell in "The Lady of the Aroostook" in describing the Captain's state-room alludes to still another kind of rug work called "hooking." The materials for this work are sold in some eities moler the name of materials for " Home-mate Turkish Rugs." At these places quite elaborate patterns can be obtained ready stamped for working. A piece of coarse burlaps or coffee bagging, a very large stout hook like a crochet hook, and a good assortment of rags are all that is nec-! essary for this work. Cut the rags very much as yon do for rag carpeting. I have found it convenient to sew. mine into long strips, varying the color frequently.

Stretch your burlaps in a frame, just a little larger than the rng will be. Wind this frame with list and fasten the burlaps firmly in. Define the onter and inmer edges of the border with a thread of coarse or darning. cotton or a charcoal line. Holding your piece of cloth under the frame, put your hook through the burlaps from the right side and draw a loop throngh to a length of about three-fonrths of an inch; repeat this avery three or four threads, according to the width and quality of your pieces. When you have worked quite a space, shear it off evenly with large seissors. This is done much more easily as the work progresses than if you wait till the whole is done. A little practice soon teaches you how far apart to put your work in. When geometrical patterns are stamped on the burlaps, very excellent imitations of Turkey rigs can be made. These patterns can be bought at quite low prices.

In Fig. 135, a very pretty style of needlework is used for ornamenting a pillow ease cover. The design must be enlarged and transferred to the material, and the work is executed in buttonhole stiteln with white embroilery cotton, after which the linen between the design figures is cut away. Burean and table searfs can be ornamented in the same wal.

A remarkable pretty little basket eame under my notice the other day, and the maker very kindly gave me directions for making it. The foundation consisted of a


Fig. 135
elliptical piece of eork cosered on the one side with some inexpeusive material, on the other with light bhe satin on which a spray of apple blossoms was painter. Into the mper sirle of this piece of cork, pins (rather large ones) were stinct at regular intervals, and pht in so as to flare a little. Shaded silks were then woven in and out of these pins in such a way as to leare alternate open spaces between the pins. Then the hasket was turned upsife down, amt pins stuck in and wound in the same way for a standard. The handle was marle of a piece of whalebone covered whth narow ribboin in two colors. Much of the beanty in such a basket worild depend on the colors employed and the perfect acenracy and neatness of the work.
"TO JIAKE PICTURES OF BIRDS WITH THEIR NATURAL

## FEATIERぶ.

The following directions are talien from the "Family Friend," an English jommal devoting much space to "fancr. work."

First take at thin hoald or panel of deal or wainscot, well seasoned, that it may not shrink; then smoothly paste on it white paluer, and let it dry, anm if the wood casts its color through, paste on it amother paper till yerfectly white; let it stamd till guite dry, and then get ally birl you wonld represent, and draw its figure as exactly as possible on the papered panel (midrlle-sized birels are the best for the purpose) ; then paint what tree or ground-work you intend to set your hird upon, also its bill and legs, leaving the rest of the body to be eovered with its own feathers. Toum mast next prepare that part to-be feathered by laying on thick gum arabic, dissolverl in:water; lay it on with a large camels luar jencil, and let it dry; lay on suceessive coats, drying eath one until you have a good body on the paper as thick, at least, as a fwenty-five cent piece; let it dry quite hard.

Take the feathers off the bird as you use them, beginniug at:the tail and points of the wings, mul working upwards to the head, obserring to cover each jnit of your dranght with the feathers taken from the same part of the bird, letting them fall over one another in tire natural.orler. Tou must prepare your feathers by entting off tue downy parts that are about their stems, and the large feathers must have the insides of then shafts shared off with a sharp knife, to make them lie flat; the gıillönf the wings minst have their inner webs elnped off; so that in laying them the g'um may hold them by their sliafts: $W$ When you begin to lay them, take a pair of steel pliers to hold the feathers in, and lave some gim-water, not tao thin, and a large camel's hair pencal ready to

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moisten the ground-work by little and little as you work it; theu lay your feathers on the moistened parts, which must not be waterish, but ouly clamm, to hold the feathers. You must have prepared a great many sugar-loaf-shaped leaden weights, which you may form by eastting the lead into satnd, in which shapes or moulds for it have been made by means of a pointed stick prodded all over the surface, leaving small holes to receive the meited lead. These weights will be necessary to set on the feathers when you have merely laid them on, in order to press them into the grm till they are fixed; but you must be cautions lest the gim comes throngh the feathers, for it would not only smear them, but would stick to the bottoms of the little weights; and in taking them off you would bring the feathers also, which would quite disarrange your work; be cantions, therefore, not to have your coat of gum too moist or wet. When you have wholly covered your bird with its feathers, you must, with a little thick gum, stick on a piece of paper, cut romed, of the size of an eye, which you must color to resemble the eye of a bird if you camot procure a glass one of the kind; and when the whole is dry, you must dress the feathers all round the outline (such as may have chanced to start), and rectify all defects in every other part; then lay on it a sheet of clean paper, and a heavy weight, such as a book, to press it; after which it may be preserved in a glass-frame, such as are used for pieces of shell-work, ete.

## A WALL BASKEt.

A very eonvenient wall pocket ean be made from a good sized Japanese fan, cretome and ribbon. Cover the fan with cretonne and put on a pocket of the same. Trim with pleated ribbon and a bow on the handle. Corered with quilted silk, or satin on which a floral design is worked or painted, makes a very handsome affair.

HONE-MADE PICTURE FRAMF.
It is sometimes desirable to frame pictures at home. Here are a few directions as to cloing it.

If the margin of your engraving or picture is not perfectly clean make a " mat " out of tinted drawing paper. 'ro do this cut your paper the size of the picture and ant in it an oval or square through which the picture may be seen. It will be necessary to draw the ontline for this very carefnlly, making very accurate measmrements, so that the margin will be symmetrical. If you wish to draw an oval and have no mathematical instruments, place a string over two pins firmly placed as foci of the ellipse. The striug should be a little longer than the distance between the pins. Move a pencil round just inside the string and the result will be an ellipse of the required form. About halt an inch outside of this draw a second oval, and with a sharp knife cut it half throngh the cardboard. These two ovals must be very sharply and neatly ent. The cardboard should be bent inward at this cut. Take a thick piece of cardboard and cut in it a hole just a little larger than the one in the "mat," and paste the latter on, laying the whole over the picture. Put the glass in its place on the top of the mat and it to the frame by strips of leather paper or even by very nice strips of brown wrapping paper making an even rim round the margin of the pieture, and pasting enough over the back to hold it firmly in place. Paste a sheet of stout brown paper over the back, inserting a piece of tape holding a small ring at the top of the frame, pasting it firmly to the pasteboord.

You' can vary this frame by rolling up some very stout brown paper and press it ont flat till it is an inch or two wide. Glue it into shape and cover with tinfoil glued on. Then fit it to the glass, slanting the corners so that they will fit neatly. A little narrow margin of red or blue
relvet glaed under the inner side of the fiame makes a pretty finish. Now glue the whole frame on to the picture.

If you have any old wooden frames you can guild them as follows: P'ut some boiled linseed oil in a sancer and expose it to the air for a few days. Then mix with some sellow ochre, ground in oil. This is oil gold size, which if you choose you can buy ready mixed. Give the frame a coat of white paint and three days after another. When quite dry, rub down smooth with the finest quality of glass paper. Then put on at coat of gold size and let it stand for twenty-four homrs, when it will be ready for the gold leaf. To put this on, take a piece of tissue paper two inches square and rulb one side lightly with wax. Get a stanght edged knife and ent the pieces just the width of the frame. Put the waxed side of the tissue paper on the gold leaf, lift it up, and lay it on the frame; rub lighty on the paper with the finger, and the gold will athere to the frame. Let each piece lap over the previons one abont an eighth of an inch, so that the joinings may not show. When the fiame is corered, "put over, it with cotton-wool. Set it away for a few hours, then brush off the superthous gold, and your frame is done.

## A FLOWER POT COYER.

Collect during the season large bunches of wheat, barley, or other heads of grass or reeds. Cut out the form of the flower pot in stiff carl-board or paste-board. Cover this neatly with rows of grass or wheat arranged as closely as possible, tacking them elosely around the bottom and expanding them around the top so that they will be eqidistant from exch ofher. Then commencing at the bottom, proceed to interweave half inch scarlet or other colored ribbon in and ont of the stalks, until the heads (extending aloove the top) are reached, when the
end must be securely fastened ofif and hidden with a rosette or bow. Wheu thus woven, cut the stitches top and bottom and remove the paste-board foundation.

A mat can be formed by cutting ont a circular piece of paste-board as much larger than the bottom as the length of the heads to be used. Cover this with cambric of a color suited to the ribbon, and fasten the lieads of grain aromul it so that they touch each other aromed the circle into which the pot fits, spreading like rays to the outer erlge.

Such a cover makes a pot of flowers a beantiful ormament for the dining talble. A pot of ferms is especially desirable for such a nse.

## WORK-BASKET WITH EMBROIDERED DIAPE.



Fig. 136.
The basket is of fancy wicker, the drape is of ruby plush, with the foliage design shownin Fig. 137, embroidered in ontline stitch with green silk. It is edged with the trimming shown in Fig. 138, which is Tenetian
exbbroidery worked in ruby silk. The dark portions of


Fig. 137.
the design are corered with knot stitches in ruby silk,


Fig. 138.
which is also used in working the twisted bars; the satin stitch is worked with old gold silk. When the work is finished, the silk is cut away between the twisted bars with sharp scissors. The edge of the deep scallop shond be worked in fine buttonhole stitch with old gold. By reference to Fig. No. 136 it will be seen that the single scallop is repeated a sufticient number of times to edge the drapery. The basket is lined with ruby silk drawn up to form a hag; it is drawn together by silk cord and tassels. The figure shows wool tufs fastened at the sides but hows of satin ribbon of the colors employed in working wonld be in better taste. The liandle may be sorered with a strip of luby satin worked with herringbone stitch in old gold.

A HOME-MADE GYPSY TABLE.


Fig. 169.

One of these convenieut little tables can be easily mate from 3 broomsticks and the top of a flomr barrel or butter tul). Cross the broomsticks in the middle, and nail them securely in place. Cut the ends off so that they will stand flat on the floor. Nail the cover of a butter tub oin the top of the tripod. A square top or one in the shape of a trefoil, can be used in place of a round one. In cutting oft the ends of the broomsticks, you must see that fou shorten them about equally above and below the crossing, leaving four stand rather below the ordinary table height. In the model plush is used for covering the top and legs of the table, and crocheted lace is used for it draping. But the covering and drapery can be raried to suit the taste of the maker. The legs can be ebonized as directed on page 83 , in the chapter on wood carving; if liked a little gilding can be put on in rings.
(2)

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[^0]:    "Blue- Fellow-Red-pure simple colors all
    (By mixtme umobtained) we l'rmaries call:
    From ticse, in various combinations blent,
    All the colors trace their one descent, Each mixed with each-their powers combined diffuse
    New colors forming Secondary hnes;
    Yellow with red makes Orange, with blue-Green;
    In blue with red admixed, is Purple seen.
    Each of these lues in Harmomy we find,
    When with its complimentary combined;
    Orange with blne, and green with red agrees,
    And purple tints near yellows always please.
    These secondary Tertiaries produce,
    And Citrine-Olive-Pusset-introdnce;
    Thms green with orange blended forms citrine, And Olive comes from purple mixed with green;
    Orange, with purple mix'd, will russet prove;
    And, being subject to the rile above,
    Ilarmonious with each tertiary we view
    The complemental secondary he.
    Thus citrine-olive-russet hamonize
    With purple-orange-green, their true allies.
    These hues, by white diluted Tints are made;
    By black, are decpened into darkest Shade.
    Pure or combin'd, the primaries all three,
    To satisfy the eye, must present be;
    If the support is wanting but of one,
    In that proportion harmony is gone ;
    -Should red be unsupported by due share'
    Of blue and yellow pure-combin'd they are
    In green, which secondary thus we see,
    The harmonizing medium of all three.
    Eellow for light contrasts dark purple's hue,
    Its complemental, form'd of red and blue.
    Red most exciting is-let nature tell
    How grateful is, and soothing green's soft spell.
    So blue retires-beyond all colors cold,

